

# LEVEL II

2

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## THE UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY SYSTEM (UMMIPS)

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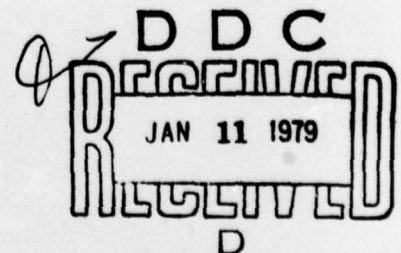
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## EXECUTIVE SUMMARY

### OBJECTIVES

The Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) has called for a review of the DoD Uniform Materiel Movement and Issue Priority System (UMMIPS) to produce a proposed UMMIPS structure that (1) effectively isolates requisitions for which expeditious supply and transportation are justified regardless of costs and (2) establishes priorities for all other requisitions based on materiel need, time of need, and associated costs. The structure is to be simple enough for ease of use, yet sophisticated enough to discriminate among situations deserving different priorities.

### PRIMARY CONCLUSIONS

We have drawn conclusions in three areas: (1) structure of the priority system, (2) structure and definition of the processing segments, and (3) prescribed time standards.

1. The purpose of a materiel priority system is to establish the relative importance of requests for assets. UMMIPS attempts to do that; additionally, it uses the requisition's relative importance (priority) as an indication of the mode of shipment (air or surface). Our analysis has shown that the requisitioner generally regards the assigned priority as a means for establishing a claim on an item (and avoiding backordering), not as an indicator of the desired shipment mode.

For the assigned priority designator to be meaningful, each should result in a different set of actions. Such is not the case with the 15 priorities in UMMIPS. Except for the sequencing of backorders, there are three



sets of actions for processing requisitions. The sequencing of back-orders uses many more "priorities" than the 15 codified in UMMIPS. The use of "priorities" not explicitly prescribed by UMMIPS was found to be unnecessary, with the exception of an emergency priority.

2. In practice it is difficult to discern the boundaries of some UMMIPS processing segments. Some segments contain more than one operation, reducing visibility and management control. Subdivisions (or the lack of them) within some segments provide insufficient information for control. In particular: the boundaries of the Requisition Submission segment are unclear; the Transportation segments (CONUS and overseas) contain both hold time and intransit time; the subdivisions established within the Inventory Control Point segment do not allow adequate information for management control; and the absence of Subdivisions for the Requisition Submission Segment also precludes needed control information.
3. The UMMIPS time standards need to be revised.

#### PRIMARY RECOMMENDATIONS

Our recommendations relate, in order, to the three areas discussed above:

1. To allow the requisitioner sufficient flexibility to specify his need for the materiel, we recommend the establishment of both an Issue Priority Designator and a Processing and Transportation Designator. The Issue Priority Designator will indicate the relative importance of requisitions for stock issuance only. The Processing and Transportation Designator will indicate the mode of shipment and the allowable consolidation time. Recognizing the use of three sets of actions for processing requisitions, we recommend the establishment of three priority categories: Emergency,

High and Routine. The Emergency category is a formalization of existing, informal actions. The High category corresponds to current Priority Groups 1 and 2, and the Routine category corresponds to Priority Group 3.

2. To clarify the boundaries of the Requisition Submission segment, we recommend that it begin with the actual date the requisitioner requests, and is denied, materiel from the initial retail supply source. To establish visibility of the CONUS and overseas hold times for transportation, we recommend the establishment of two processing segments, one for CONUS hold and one for overseas hold.

Analysis of the Inventory Control Point and the Requisition Submission processing segments showed extensive processing times. To provide adequate information for management control, we recommend the establishment of three subdivisions for each of the segments.

3. Revised UMMIPS time standards are recommended, as shown in the following table.

# RECOMMENDED TIME STANDARDS

|  |                                   | TIME STANDARDS (CALENDAR DAYS) |       |       |       |         |       |       |
|--|-----------------------------------|--------------------------------|-------|-------|-------|---------|-------|-------|
|  |                                   | Emer-<br>gency                 | HIGH  |       |       | ROUTINE |       |       |
| Priority Category  |                                   |                                | PRE.  | STD.  | DIS.  | PREMIUM |       | STD.  |
| Issue Priority Designator  |                                   |                                |       |       |       | AIR     | SUR.  |       |
|  |                                   | 00                             | 01-07 | 01-07 | 01-07 | 08-12   | 08-12 | 08-12 |
| Processing and Transportation Designator   |                                   | 0                              | a     | b     | d     | c       | d     | e     |
| P<br>R<br>O<br>C<br>E<br>S<br>S<br>I<br>N<br>G<br>S<br>E<br>R<br>V<br>I<br>C<br>E<br>S | A. Requisition Submission         |                                |       |       |       |         |       |       |
|  | 1. AUTODIN                        | .125                           | 1     | 1     | 1     | 1       | 1     | 1     |
|  | 2. Other CONUS                    | .125                           | 3     | 3     | 3     | 3       | 3     | 6     |
|  | 3. Other Overseas                 | .25                            | 4     | 4     | 4     | 4       | 4     | 9     |
|  | B. ICP Availability               | .125                           | 1     | 1     | 1     | 1       | 1     | 1     |
|  | C. Depot Processing               | .25                            | 1     | 1     | 4     | 4       | 4     | 8     |
|  | D. Depot Hold                     | .25                            | 1     | 1     | 2     | 2       | 2     | 5*    |
|  | E. CONUS Intransit                | .375                           | 2     | 4     | 4     | 2       | 4     | 7     |
|  | CCNUS Seg.                        | 1.125                          | 6     | 8     | 12    | 10      | 12    | 22    |
|  | F. POE/APCE Hold                  | .25                            | 2     | 2     | 2     | 2       | 2     | 13*   |
|  | G. Overseas Shipment/<br>Delivery |                                |       |       |       |         |       |       |
|  | 1. West. Hemisphere               | .50                            | 4     | 4     | 4     | 4       | 4     | 25    |
|  | 2. Europe, Med., Africa           | .75                            | 6     | 6     | 6     | 6       | 6     | 30    |
|  | 3. West. Pacific                  | 1.25                           | 7     | 7     | 7     | 7       | 7     | 40    |
|  | H. Receipt Take-Up                | .25                            | 1     | 1     | 1     | 1       | 1     | 3     |
|  | TOTAL CONUS                       | 1.375                          | 7     | 9     | 13    | 11      | 13    | 25    |
|  | TOTAL OVERSEAS                    |                                |       |       |       |         |       |       |
|  | 1. West. Hemisphere               | 2.125                          | 13    | 15    | 19    | 17      | 19    | 63    |
|  | 2. Europe - Africa                | 2.375                          | 15    | 17    | 21    | 19      | 21    | 68    |
|  | 3. West. Pacific                  | 2.875                          | 16    | 18    | 22    | 20      | 22    | 73    |

\*When SEAVAN consolidation is accomplished at the depot, the Depot Hold Time is 15 days, and the POE Hold Time Standard is 3 days.

NOTE: Only AUTODIN summations are shown.



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## GLOSSARY

|            |   |
|------------|---|
| CASREPS    | Casualty Reporting System                                       |
| CCP        | Central Consolidation Point                                     |
| DLA        | Defense Logistics Agency  |
| FAD        | Force Activity Designator                                       |
| ICP        | Inventory Control Point   |
| IDC        | Intransit Data Card   |
| IPD        | Issue Priority Designator                                       |
| LOGAIR     | Logistics Air (Air Force)                                       |
| MILSTEP    | Military Supply and Transportation<br>Evaluation Procedures     |
| MOFAST     | Mechanization of Freight Packing and<br>Shipping Terminal (DLA) |
| MRO        | Materiel Release Order  |
| NIIN       | National Item Identification Number                             |
| NORS       | Not Operationally Ready Supply                                  |
| NRTS       | Not Repairable This Station                                     |
| NSN        | National Stock Number   |
| PD         | Priority Designator   |
| PG         | Priority Group  |
| POD        | Port of Debarkation   |
| POE        | Port of Embarkation   |
| PTD        | Processing and Transportation<br>Designator                     |
| QUICKTRANS | Quick Transportation (Navy)                                     |

|     |                            |
|-----|----------------------------|
| RAD | Required Availability Date |
| RDD | Required Delivery Date     |
| TO  | Transportation Officer     |
| TP  | Transportation Priority    |
| UND | Urgency of Need Designator |

## I. INTRODUCTION

### A. BACKGROUND

The Uniform Materiel Movement and Issue Priority System (UMMIPS) prescribes DoD policy and criteria for ranking materiel requirements for all DoD components in peacetime and wartime. Those policies and criteria apply to the requisition, issue, and movement of all DoD-managed materiel. Currently there are 15 Priority Designators (PDs) in use, which represent combinations of designators for the requisitioning activity's mission and urgency of need.

The 15 PDs are arranged in three Priority Groups (PGs), each having specific time standards for processing requisitions and delivering materiel. PGs 1 and 2 are considered high priority, while PG 3 is considered routine. The high priority groups constitute approximately 40 percent of about 28 million requisitions submitted each year. The current time standards for CONUS-generated requisitions allow 7 days for PG 1, 11 days for PG 2, and 28 days for PG 3. The mean time incurred in processing and delivery for CONUS-generated requisitions is about 21 days for high priority requisitions, and about 29 days for routine requisitions.<sup>1</sup>

Processing and delivery are more costly for high priority requisitions than for routine requisitions, mainly because air transportation is frequently used. Current criteria for selecting the appropriate PD do not differentiate between situations where cost should be a determinant and where it should not.

The performance of the existing priority system suggests several questions. First, are 15 PDs and 3 PGs the most effective arrangement for meeting

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<sup>1</sup>Overseas processing standards and delivery times are a function of the geographic region (there are three) to which materiel is being shipped.



the needs of the Military Services? Second, is the priority system overburdened with high priority requisitions; and, if so, is the result excessive supply and transportation costs and an erosion of the priority system? Third, are the additional costs of high priority requisitions justified by the benefits of shorter processing and delivery times? Finally, are the present time standards realistic; and if not, what should they be?

B. OBJECTIVES AND SCOPE

The objective of this study is to recommend a UMMIPS structure that effectively isolates requisitions for which expeditious supply and transportation actions are justified, regardless of costs; and orders priorities for all other requisitions on the basis of materiel need, time of need, and associated costs.

LMI was tasked to review and evaluate current UMMIPS policy, criteria and practices and to recommend policy, criteria, and procedural changes that would increase the effectiveness and integrity of the priority system with respect to both cost-sensitive and non-cost-sensitive requisitions. Five subtasks were specified.

1. Evaluate current criteria for assigning PDs. Conclude whether those criteria adequately distinguish requisitions that should not be subjected to cost tradeoffs. Develop recommended criteria.
2. Establish the number of substantially different methods of processing materiel requisitions and how each relates to current PDs.
3. Identify differences in the various methods of processing materiel requisitions in terms of: time standards, actual time performance, and associated costs. Establish whether current time standards are realistic, and whether the time/cost variations differ sufficiently to warrant different PDs.
4. Draw a sufficient sample of requisitions to establish the economic and noneconomic impacts of applying various PDs. In addressing noneconomic impacts, consider operational readiness, safety, personnel morale and comfort, work delays or stoppages not easily economically quantifiable and other pressures exerted on the requisitioner.

5. Based on the above analyses, develop appropriate recommendations for improving UMMIPS to meet the objectives of this study.

The data base required to track requisitions for the performance of sub-task four was difficult to access-often nonexistent, vague and unreliable. Also, no suitable measurements were found to assess the impact of delayed delivery. Thus sampling requisitions proved to be impracticable.

#### C. STUDY APPROACH

In general, the purpose of any priority system is to allocate limited resources to those elements that collectively contribute to an overall objective. The allocation depends upon the relative importance of each of the elements. The overall objective of UMMIPS is to resupply the military forces with required materiel in both peacetime and wartime. To achieve that objective, standard practices have been established. Such practices consist of methods which include procedures for handling and processing materiel requisitions. Those methods presumably have been designed to provide effective and economic materiel support within existing resource constraints.

Often two or more sets of actions may be established to achieve the objectives of an operation. Some sets of actions may be more costly than others in order to perform the operation faster. Such is the case with the military materiel support system. Certain sets of actions have been established for processing requisitions, issuing assets, consolidating shipments and determining transportation modes. UMMIPS governs the selection of the appropriate set of actions for a specific set of conditions.

Each distinct set of actions should be related to a distinct PD and should result in a significant difference in allocation of assets, delivery time, or costs for processing, handling, or transporting the requisitioned items. Otherwise, there would be no reason for having two distinct PDs. The

conditions that justify a specific set of actions are the criteria for assigning a distinct PD.

LMI therefore examined the various sets of actions applied to the processing and handling of materiel requisitions and the criteria by which they are justified. Both economic and noneconomic criteria were included, because there are situations in a military environment where cost may be relatively unimportant compared with time.

This approach led to the examination of each UMMIPS processing segment. In doing so, we attempted to identify all of the different actions that would be performed as a result of a requisitions's PD. Given the 15 PDs, one would expect to find 15 different actions, one for each priority.

On the basis of this analysis and interviews with military and civilian personnel, we arrived at certain conclusions and recommendations. Chapter II describes the analysis in detail (the UMMIPS processing time segments and the conclusions reached.) Chapter III offers 28 recommendations based on our conclusions.



## II. ANALYSIS OF EXISTING UMMIPS STRUCTURE

### A. GENERAL DESCRIPTION

The current UMMIPS priority system is set forth in DoD Directive 4410.6, February 18, 1971. The system uses 15 PDs to determine the relative importance of materiel requisitions. The PD is assigned according to the requisitioning unit's Force/Activity Designator (FAD), assigned by the Joint Chiefs of Staff and the requisitioner's Urgency of Need (UND).<sup>1</sup> The five FADs and three UNDs are combined as shown in Table 1 to yield the 15 PDs.

TABLE 1. UMMIPS PRIORITY DESIGNATORS

| FAD | A  | B  | C  |
|-----|----|----|----|
| I   | 01 | 04 | 11 |
| II  | 02 | 05 | 12 |
| III | 03 | 06 | 13 |
| IV  | 07 | 09 | 14 |
| V   | 08 | 10 | 15 |

UMMIPS divides the requisitioning process into seven processing segments. This is done so that each segment contains one operation, which can be measured, creating management visibility and control. We will see that in some cases a processing segment contains more than one operation.

The UMMIPS processing segments are: Requisition Submission, Passing Action, Inventory Control Point (ICP) Availability Determination, Depot/Storage Site Processing, Transportation Hold and CONUS Intransit, Overseas Shipment/Delivery, and Receipt Take-Up by Requisitioner. Associated with each

<sup>1</sup>There are three UNDs: A, B, and C. UND A is generally used when the requisitioner is unable to perform his mission; B is generally used when the requisitioner's mission is impaired; C is thus used for routine resupply and anything else.

processing segment are three time standards, which are a function of the requisition's PG. Requisition processing is supposed to be completed within the prescribed UMMIPS time standard for the PG in question.

This chapter describes each UMMIPS processing segment in terms of its current definition, practices and procedures, time standards and performance, and time and cost differences among the PGs and draws conclusions about each segment.

## B. REQUISITION SUBMISSION AND PASSING ACTION

### 1. Definition

The Requisition Submission time segment currently is defined as extending "...from the date of the requisition to the date of receipt by the initial wholesale supply source, e.g., inventory control point, stock point, which maintains any asset availability records for the purpose of filling materiel demands or ordering other supply action." (DoDD 4410.6, p. 2-1) The Passing Action time segment is defined as extending "...from the date that the initial supply source receives the requisitions until the date of receipt by the ultimate supply source, e.g., the appropriate CONUS ICP." (DoDD 4410.6, p. 2-1)

The Passing Action segment exists only in the Navy. Even the need for, and interpretation of, this segment within the Navy is doubtful. Because of the many echelons of the Navy's supply system, it is difficult to ascertain where Requisition Submission ends and Passing Action begins. Therefore, the two segments will be treated as one in this discussion.

### 2. Practices and Procedures

There are four basic methods of submitting requisitions: AUTODIN, telephone, message, and mail. The AUTODIN method is almost completely automated and is the preferred method for all priorities. With this method, the

requisition's data are transmitted directly to a computer, checked for certain types of errors, and forwarded electronically to the appropriate ICP or stock point. The process is interrupted only when an error, such as an incorrect stock number, is detected, or when there is a computer failure. Telephone, message, and mail are used when AUTODIN facilities are not available, or when the requisition includes exception data.

It seems appropriate to consider Requisition Submission in three categories: (1) requisitions submitted via AUTODIN without exception data; (2) requisitions submitted from CONUS via other means, with or without exception data; and (3) requisitions submitted from overseas via other means, with or without exception data. It is difficult to compare time-performance data among the Services in these three categories for several reasons.

First, the dating of requisitions is inconsistent. In some cases, the date of the requisition is the date the ultimate user requests the item from his base supply or stock point. In others, the date of the requisition is the date the base supply office enters the requisition into the wholesale supply system.

Second, Requisition Submission data are not currently reported in the three categories mentioned above.

Finally, the use of AUTODIN facilities and the percentage of requisitions requiring exception data are not known to be consistent across the Services. For instance, a sample of approximately 58,000 requisitions submitted to the Navy Ships Parts Control Center during December 1976 indicated 67 percent were submitted via AUTODIN. On the other hand, Air Force data for all requisitions submitted during December and January of Fiscal 1976 show that about 89 percent were submitted via AUTODIN.



### 3. Time Standards and Performance

Current time standards for Requisition Submission are one day for PGs 1 and 2 and two days for PG 3. However, the time standards currently allowed for the Passing Action segment are also one day for PGs 1 and 2 and two days for PG 3. As explained above, we have chosen to consider Passing Action as part of Requisition Submission. Thus, present time standards may be considered to be two days for PGs 1 and 2 and four days for PG 3.

Table 2 shows a comparison of the current time standards vs. FY 76 performance time for all DoD requisitions submitted. Several observations may be made. First, performance time considerably exceeds present time standards. Mean days for completion exceeds the standard time in each PG from 32.5 percent to 350 percent. Second, overseas requisitions take almost twice as much time as those for CONUS. Finally, in every case, the mean days for completion equals or exceeds the number of days required to complete the submission process for 75 percent of the requisitions. Thus, 25 percent of the requisitions take exceptionally long times for submission, which suggests significant time differences in requisition submission methods.

### 4. Relative Time and Cost

For requisitions transmitted by AUTODIN, there is little time/cost difference among priorities. The AUTODIN system treats requisitions the same regardless of priority. A small time/cost difference does occur in the submittal of requisitions via AUTODIN because high priority requisitions are submitted more frequently than low priority requisitions.

When other transmission modes are used, again there is little time/cost difference among priorities. The reason is that the other modes normally are used when the requisition, regardless of priority, contains exception data.

TABLE 2. REQUISITION SUBMISSION:  
CURRENT TIME STANDARDS VS.  
FY 76 PERFORMANCE FOR ALL DoD

| Category         | Total No.<br>of Req's.<br>(Millions) | % of DoD<br>Total | % of DoD<br>CONUS or<br>Overseas | % of DoD<br>P.G. | Mean Days<br>for<br>Completion | Days for<br>75%<br>Completion | Current<br>Standard<br>Time |
|------------------|--------------------------------------|-------------------|----------------------------------|------------------|--------------------------------|-------------------------------|-----------------------------|
| <u>DoD Total</u> | <u>28.068</u>                        | <u>100.00</u>     |                                  |                  |                                |                               |                             |
| <u>CONUS</u>     | <u>21.453</u>                        | <u>76.43</u>      | <u>100.00</u>                    |                  | <u>5.3</u>                     | <u>4.9</u>                    |                             |
| PG 1             | 2.836                                | 10.10             | 13.22                            | 77.44            | 4.3                            | 3.0                           | 2                           |
| PG 2             | 5.307                                | 18.91             | 24.74                            | 71.00            | 6.0                            | 5.8                           | 2                           |
| PG 3             | 13.310                               | 47.42             | 62.04                            | 78.61            | 5.3                            | 5.0                           | 4                           |
| <u>OVERSEAS</u>  | <u>6.615</u>                         | <u>23.57</u>      | <u>100.00</u>                    |                  | <u>9.9</u>                     | <u>9.7</u>                    |                             |
| PG 1             | .826                                 | 2.94              | 12.49                            | 22.56            | 6.6                            | 5.9                           | 2                           |
| PG 2             | 2.168                                | 7.72              | 32.77                            | 29.00            | 9.0                            | 8.5                           | 2                           |
| PG 3             | 3.621                                | 12.90             | 54.74                            | 21.29            | 11.2                           | 11.2                          | 4                           |

## 5. Conclusions

Analysis of the Requisition Submission and Passing Action processing time segments leads to two conclusions. First, the beginning of Requisition Submission varies from Service to Service. Thus, there is a need for consistent dating among the Services to aid understanding of the data and promote inter-service comparisons.

Second, there is very little time/cost difference among priorities. Requisitions are generally processed the same way, regardless of priority, and AUTODIN is consistently the preferred mode of submission. Differences in the processing time occur because requisitions containing exception data are submitted via the other modes. The submission of overseas requisitions, with and without exception data, also causes longer processing times.

### C. ICP AVAILABILITY DETERMINATION

#### 1. Definition

The ICP Availability Determination time segment currently extends "...from the date the requisition is received by the ultimate supply source to the date that a materiel release/issue instruction (either document or punched card) is transmitted to the depot/storage site. This segment includes time required by supply source key punching of requisitions manually prepared by the requisitioner." (DoDD 4410.6, p. 2-2)

The purpose of the ICP Availability Determination segment is to allow the ICP to maintain central control over the system's assets. The ICP issues assets in response to valid requisitions. When items are out of stock, the ICP is supposed to sequence requisitions for backorder release, based upon their PD.

The Services and the Defense Logistics Agency (DLA) have different numbers of ICPs. In some cases, the Services and DLA collocate their own ICP with the depot.



## 2. Practices and Procedures

ICP practices and procedures vary between each Service and DLA, as explained below.

### a. Army

Requisition processing begins at the ICP at 6:00 A.M. daily. High priority requisitions (01-08) are processed first, followed by low priority requisitions (09-15). If the volume is large enough, additional processing cycles are performed. Differences in treatment of priorities become evident when an item is out of stock.

When stock becomes available and backordered requisitions are being ordered to be filled, many more than the normal 15 priorities come into play. Backorder release also depends on whether the requisition is for a Not Operationally Ready Supply (NORS), JCS code, 999 code, intensive management item, weapon system designator code, or national emergency.<sup>2</sup>

Whether on hand assets are released depends on the requisition's priority and whether it is for a NORS, JCS code, etc. In other words, for certain "priorities," the Army will use pre-positioned war reserves.

### b. Navy

Navy ICP practices and procedures are complex because of the many layers in their supply system.

A requisition received by the point of entry stock point will either be filled (if stock is on hand) or passed to the ICP (if no stock is on

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<sup>2</sup>These designations (NORS, JCS code, 999 code, intensive management item, weapon system designator code, and national emergency) are used as additional priorities superimposed upon the actual Priority Designator (01-15).

hand. When stock is on hand, the ICP will be notified, after the requisition has been filled, so that it may alter its asset records accordingly. In addition, the ICP processing time is entered into the Military Supply and Transportation Evaluation Procedures (MILSTEP) as being zero.

When the requisition is passed to the ICP, a materiel release order will be directed to a stock point which, according to the ICP's records, has stock on hand. However, due to the practice of issuing stock and notifying the ICP afterwards, the stock point which receives the materiel release order may not have stock on hand. The ICP then may have to search all the stock points which carry the requisitioned item, resulting in a very time-consuming process.

The Navy ICPs have different processing cycles, depending on the PG (PGs 1 and 2 are processed more frequently than PG 3). However, the principal difference in processing the various priorities is in the sequencing of items for backorder release. The Navy uses JCS project codes, NORS/Casualty Reporting System (CASREPS) Required Delivery Dates (RDDs), 999 indicators in addition to the standard PDs (01-15).

The Navy ICPs have another interesting procedure, the extensive coding of items for manual review. In one ICP (the Ships Parts Control Center), approximately 25 percent of all the National Item Identification Numbers (NIINs) stocked are coded for manual review. This has caused 25 percent of the requisitions received to be subject to individual review by item managers, resulting in serious ICP processing inefficiencies.

c. Air Force

ICP processing procedures in the Air Force are much simpler than in the Navy. This is partly due to different mission requirements, and partly to the Air Force's extensive use of computers in the requisitioning process.

Air Force ICPs typically process two cycles per day. During the first cycle, requisitions of all priorities are processed. The second cycle processes strictly NORS requisitions, regardless of the assigned PDs. Some ICPs may process more than two cycles per day if the workload is heavy enough.

The Air Force uses many more than the standard 15 PDs to indicate a requisition's relative importance. The NORS coding of a requisition is used in processing and in sequencing backordered requisitions. Also used for sequencing the filling of backordered requisitions are: JCS codes, the sequence of date within priority categories, etc.

The Air Force also reviews requisitions manually at the ICP, but to a lesser extent than the Navy. Items normally are coded for item manager review if they are either in short supply or are air munitions. At one Air Force base visited, 5 percent of the items stocked are coded for item manager review.

d. Marine Corps

The Marine Corps has one ICP, located in Albany, Georgia. ICP processing is on a 24-hour-day, 6-day-week basis. When stock is on hand, there is essentially no difference among priorities. However, when an item is out of stock, many more than the standard 15 priorities are used for sequencing the filling of backordered requisitions. In addition to the 15 PDs, NORS codes, weapon systems designator codes, intensive management designations and special situations are used as priorities. Pre-positioned war reserves are used for high priority (01-03) requisitions and in special situations.



e. DLA

The ICPs in DLA normally operate on a 24-hour-day, 7-day-week basis for high priority requisitions (01-08). Low priority requisitions (09-15) are processed on a 5-day-week-basis. High priority requisitions normally are batched early in the morning, followed by a batching of low priority requisitions in the late afternoon (4:00 P.M.).

Materiel backorder release is extremely complicated. JCS project codes, 999 codes, Required Availability Data (RAD), NORS, and the actual PD are all used to determine the order in which materiel is released. Other "priorities," such as weapon system designator codes and intensive management designations, are ignored.

In addition, DLA has two "stock reservation" levels. When the amount of stock on hand descends to the first reservation level, priorities 01-08 are issued and priorities 09-15 backordered. If the quantity of stock on hand descends to the second stock reservation level, only priorities 01-03 are issued, with 04-15 backordered.

Another DLA practice is to stock items at Navy stock points solely for Navy use. The Navy draws upon those stocks and then notifies DLA so that DLA's inventory records may be adjusted.

3. Time Standards and Performance

The ICP Availability Determination segment currently has time standards of one day for PGs 1 and 2, and three days for PG 3. These time standards are the same for both CONUS and Overseas requisitions. Figures 1 and 2 indicate overall DoD performance with respect to these time standards.

Overall DoD performance with respect to the current time standards is good for most requisitions. Individual Service and DLA performances are similar; hence, to avoid unnecessary repetition, only the overall DoD results

FIGURE 1. DoD INVENTORY CONTROL POINT PROCESSING TIME

(CONUS Requisitions, All Issues)

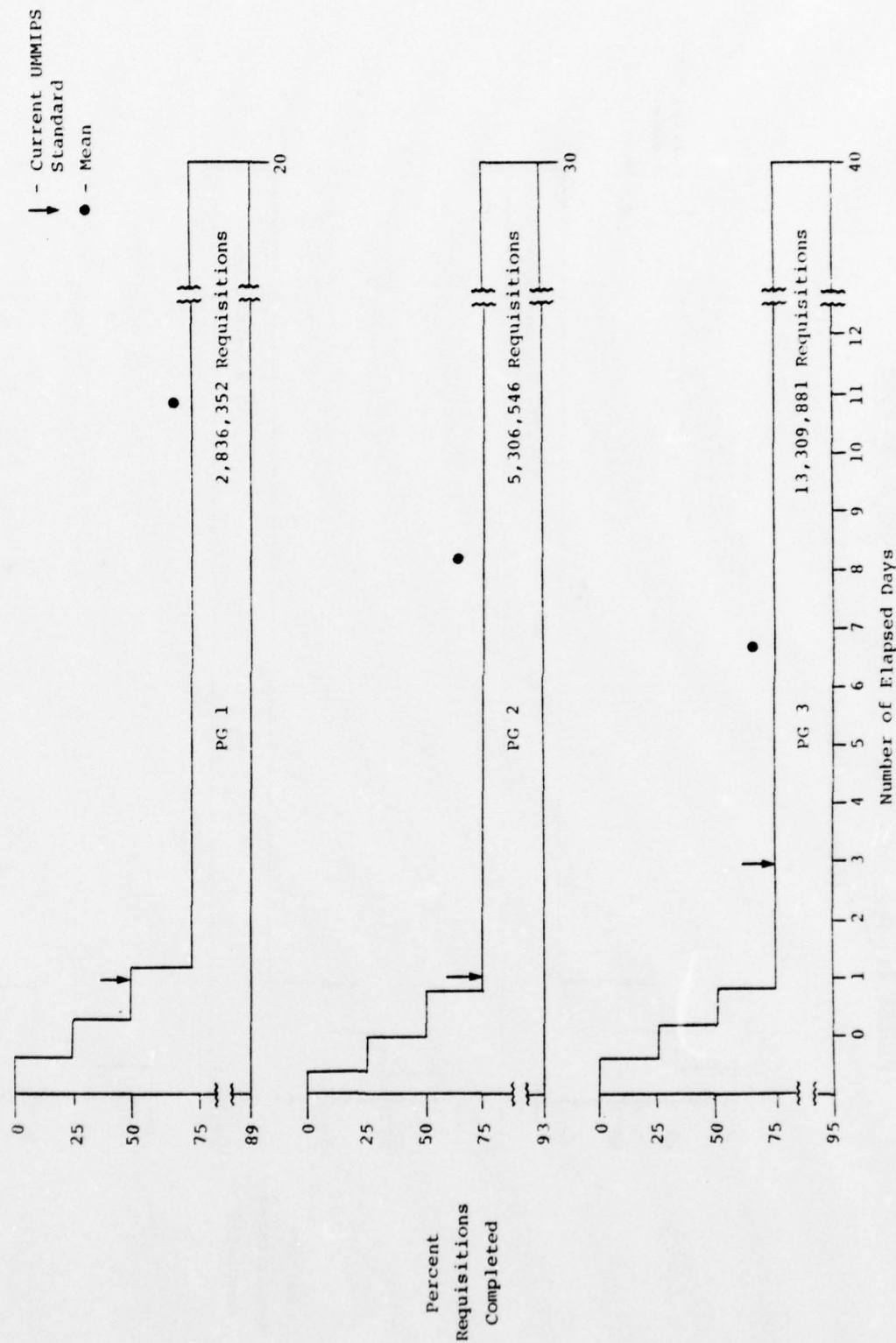
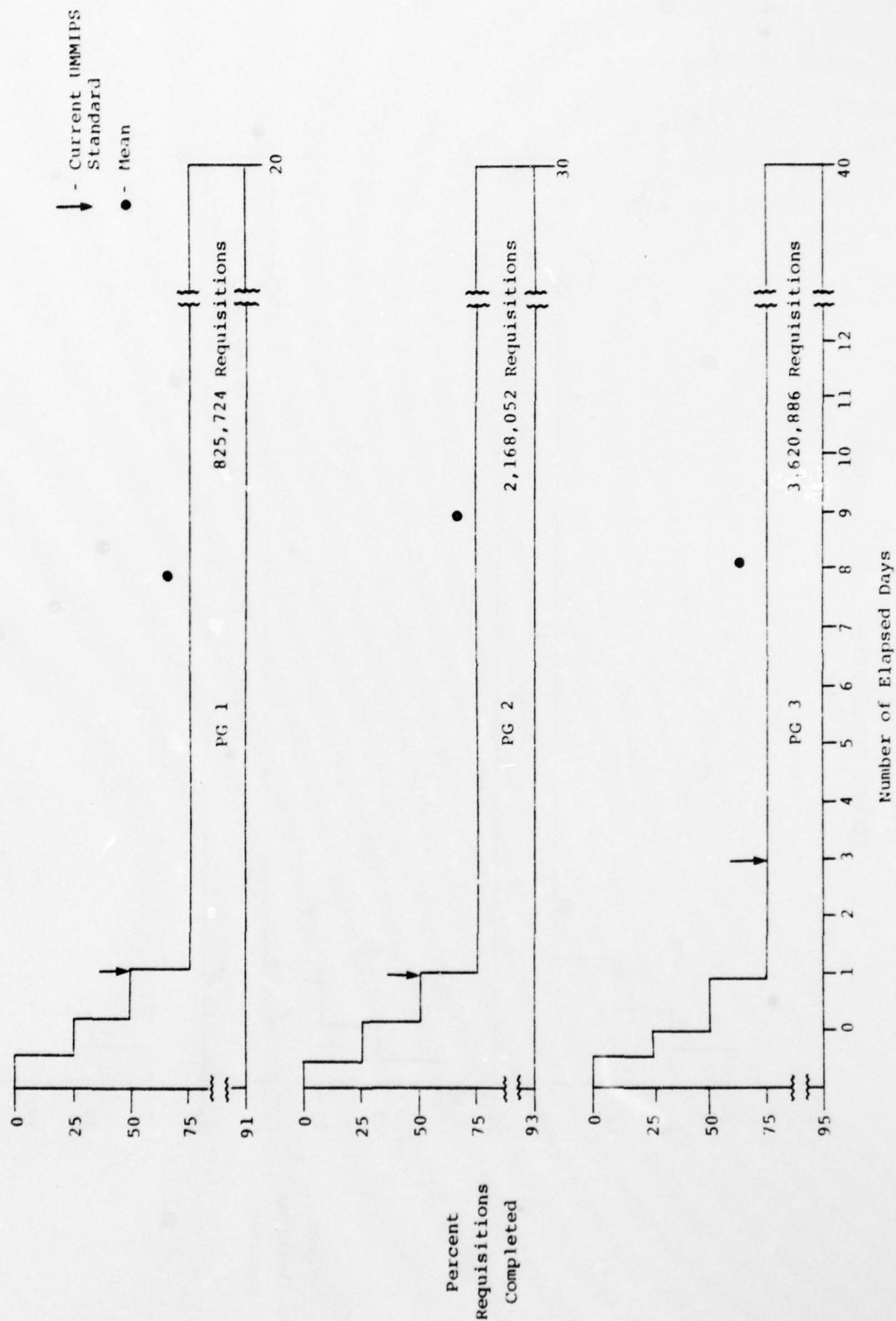


FIGURE 2. DoD INVENTORY CONTROL POINT PROCESSING TIME

(Overseas Requisitions, All Issues)





are given. Making comparisons vertically on Figures 1 and 2, one sees little difference among the three PGs, with about 75 percent of the PG 1 and 2 requisitions completed on time, and even better experience with PG 3 requisitions.

Each distribution has a mean, which is considerably beyond the point at which 75 percent of the requisitions are completed. The skewness of these distributions is caused by extremely long tails (extended processing times). In order to determine why the ICP processing time should take beyond 20, 30 or even 40 days for PGs 1, 2, and 3, respectively, the All Issues category was broken down into its subcategories: immediate issues, and delayed issues. Table 3 gives a comparison of the numbers of requisitions in the two subcategories.

TABLE 3. IMMEDIATE VS.  
DELAYED ISSUE REQUISITIONS

|          | <u>Number of Requisitions</u><br><u>(Millions)</u> |             |             | <u>Percent of All Issues</u> |             |             |
|----------|--|-------------|-------------|------------------------------|-------------|-------------|
|          | <u>Immediate Issues</u>                            |             |             |                              |             |             |
|          | <u>PG 1</u>  | <u>PG 2</u> | <u>PG 3</u> | <u>PG 1</u>                  | <u>PG 2</u> | <u>PG 3</u> |
| CONUS    | 2.4  | 4.7         | 12.1        | 85.7                         | 88.7        | 91.0        |
| Overseas | 0.7  | 1.9         | 3.2         | 87.5                         | 86.4        | 88.9        |
|          | <u>Delayed Issues</u>                              |             |             |                              |             |             |
|          | <u>PG 1</u>  | <u>PG 2</u> | <u>PG 3</u> | <u>PG 1</u>                  | <u>PG 2</u> | <u>PG 3</u> |
| CONUS    | 0.4  | 0.6         | 1.2         | 14.3                         | 11.3        | 9.0         |
| Overseas | 0.1  | 0.3         | 0.4         | 12.5                         | 13.6        | 11.1        |

CONUS and Overseas immediate issue ICP processing times are shown in Figures 3 and 4. The forms of these graphs are the same as those in Figures 1

FIGURE 3. DoD INVENTORY CONTROL POINT PROCESSING TIME

(CONUS Requisitions, Immediate Issues)

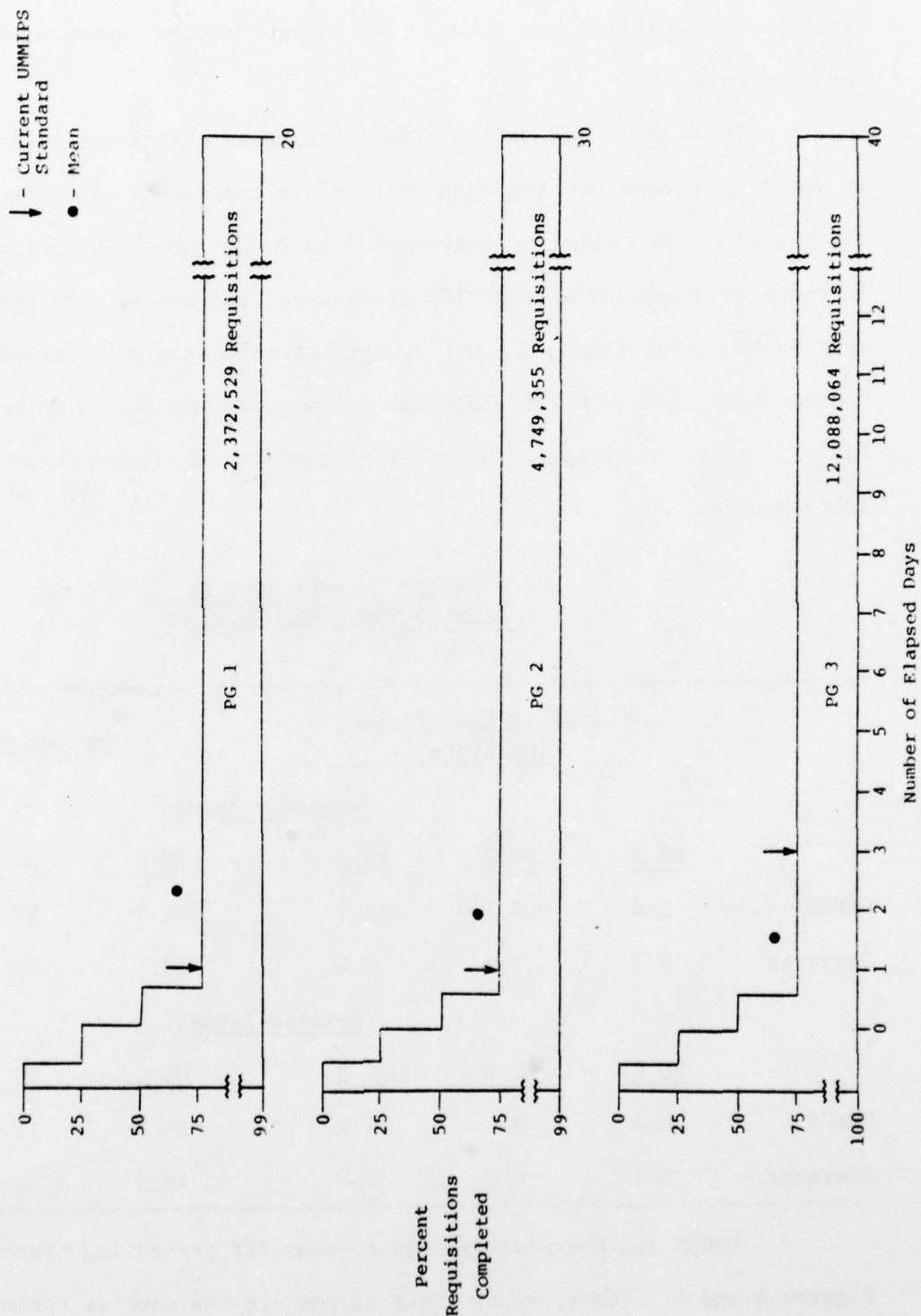
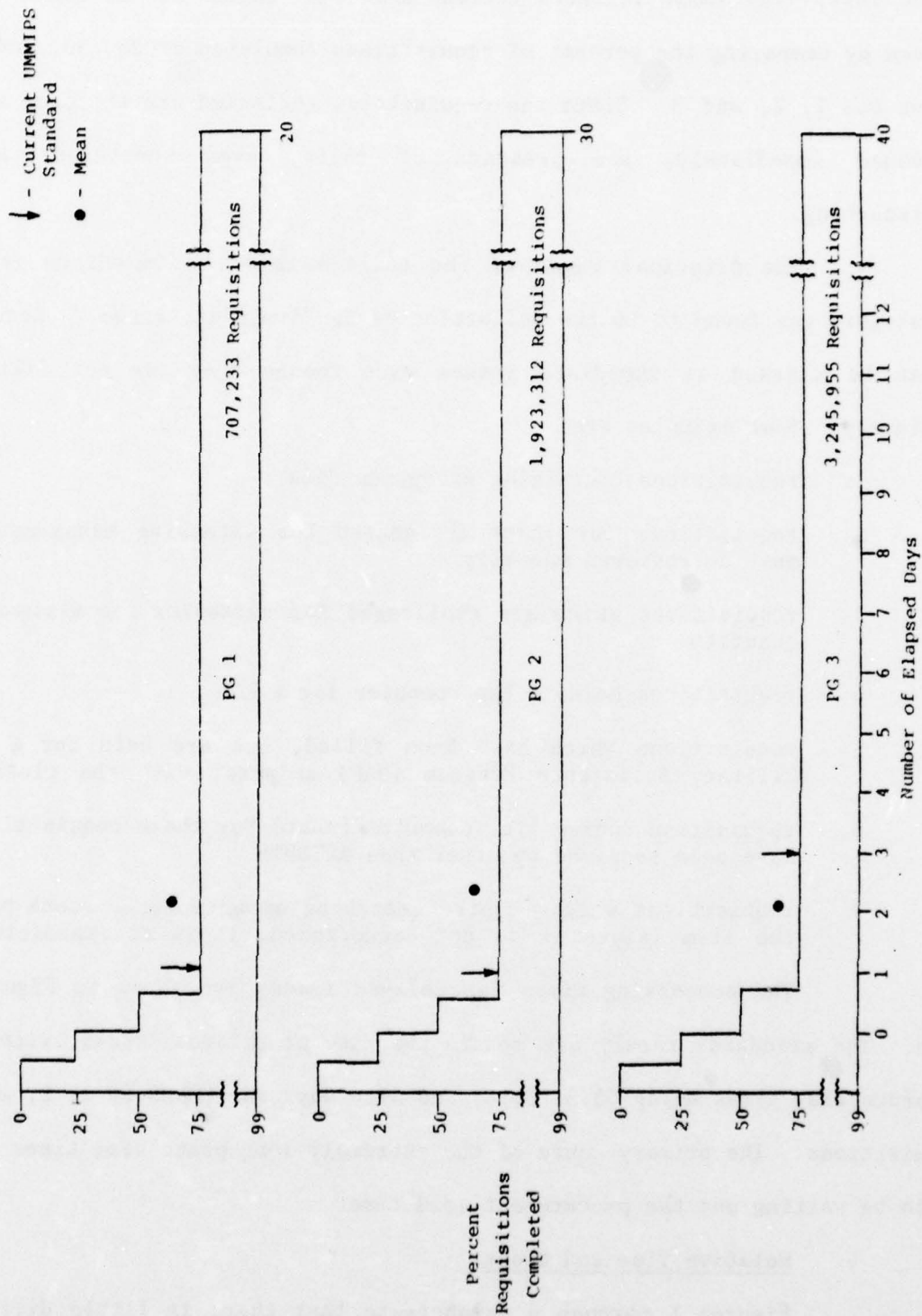


FIGURE 4. DoD INVENTORY CONTROL POINT PROCESSING TIME

(Overseas Requisitions, Immediate Issues)



and 2; however, the mean processing times in Figures 3 and 4 have shifted to the left. The shift reflects decreases in the lengths of the tails. This is seen by comparing the percent of requisitions completed at 20, 30, and 40 days for PGs 1, 2, and 3. Since the requisitions reflected are the ones that were issued immediately, the presence of tails, even shortened tails, is disturbing.

The principal cause of the tails within the immediate issue subcategory was found to be the definition of an "immediate issue." Requisitions can be classed as immediate issues even though they are not filled immediately. Some examples are:

1. requisitions containing exception data
2. requisitions for items designated for intensive management, which must be reviewed manually
3. requisitions which are challenged for exceeding the maximum release quantity
4. requisitions held in the computer for a RDD
5. requisitions which have been filled, but are held for a RAD or a Military Assistance Program (MAP) shipment with the clock running
6. requisition coding (for computer input) for those requisitions which have been received by other than AUTODIN
7. requisitions which require searching among various stock points for the item (since it is not backordered, it is an immediate issue).

The processing times for delayed issues are shown in Figures 5 and 6. The standards rarely are met in the case of delayed issues, with the mean processing times being 55.3, 60.8, and 57.0 days for CONUS PG 1, 2, and 3 requisitions. The primary cause of the extremely long processing times was found to be waiting out the procurement lead time.

#### 4. Relative Time and Costs

Figures 1 through 6 demonstrate that there is little difference in processing time among the three PGs. Specifically, the All issues graphs



FIGURE 5. DoD INVENTORY CONTROL POINT PROCESSING TIME

(CONUS Requisitions, Delayed Issues)

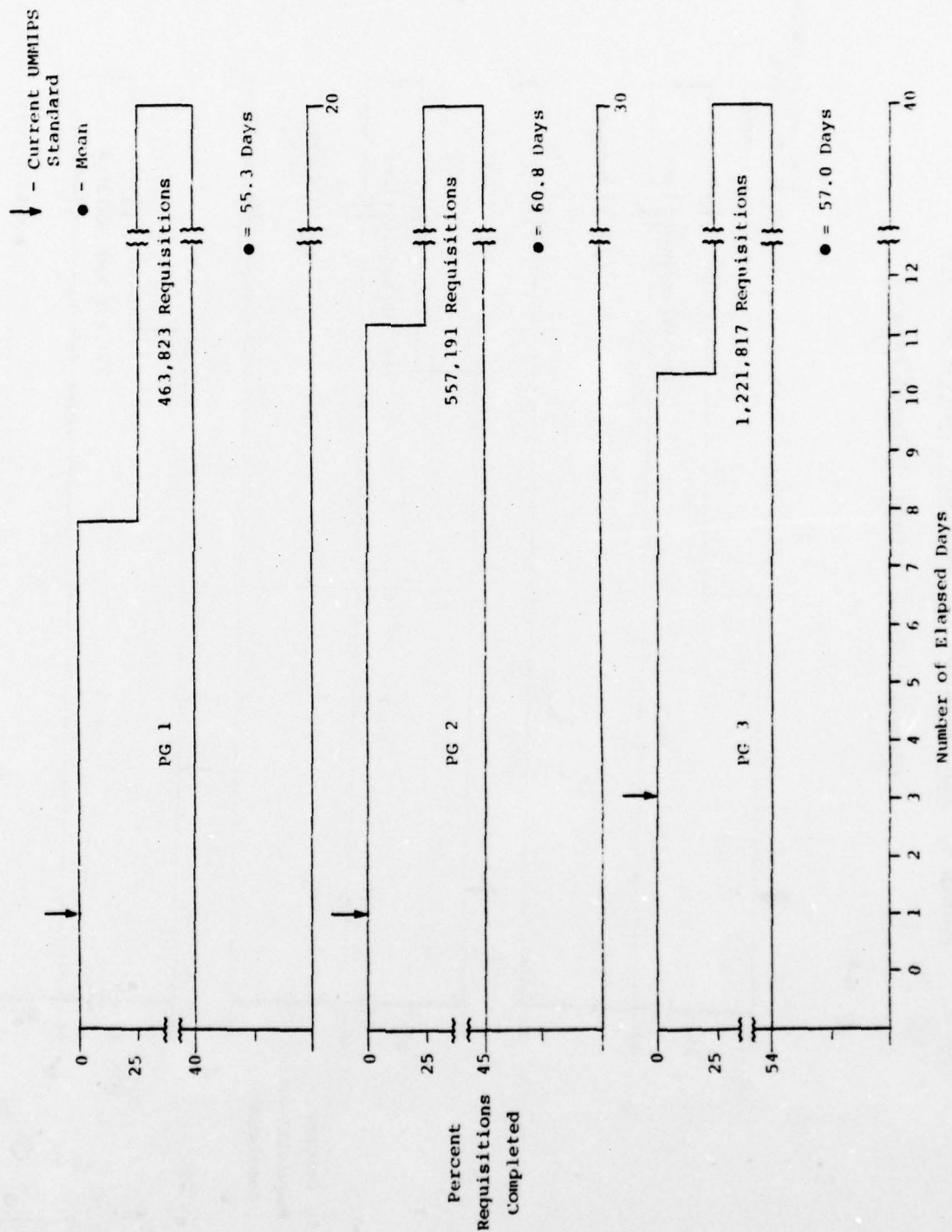
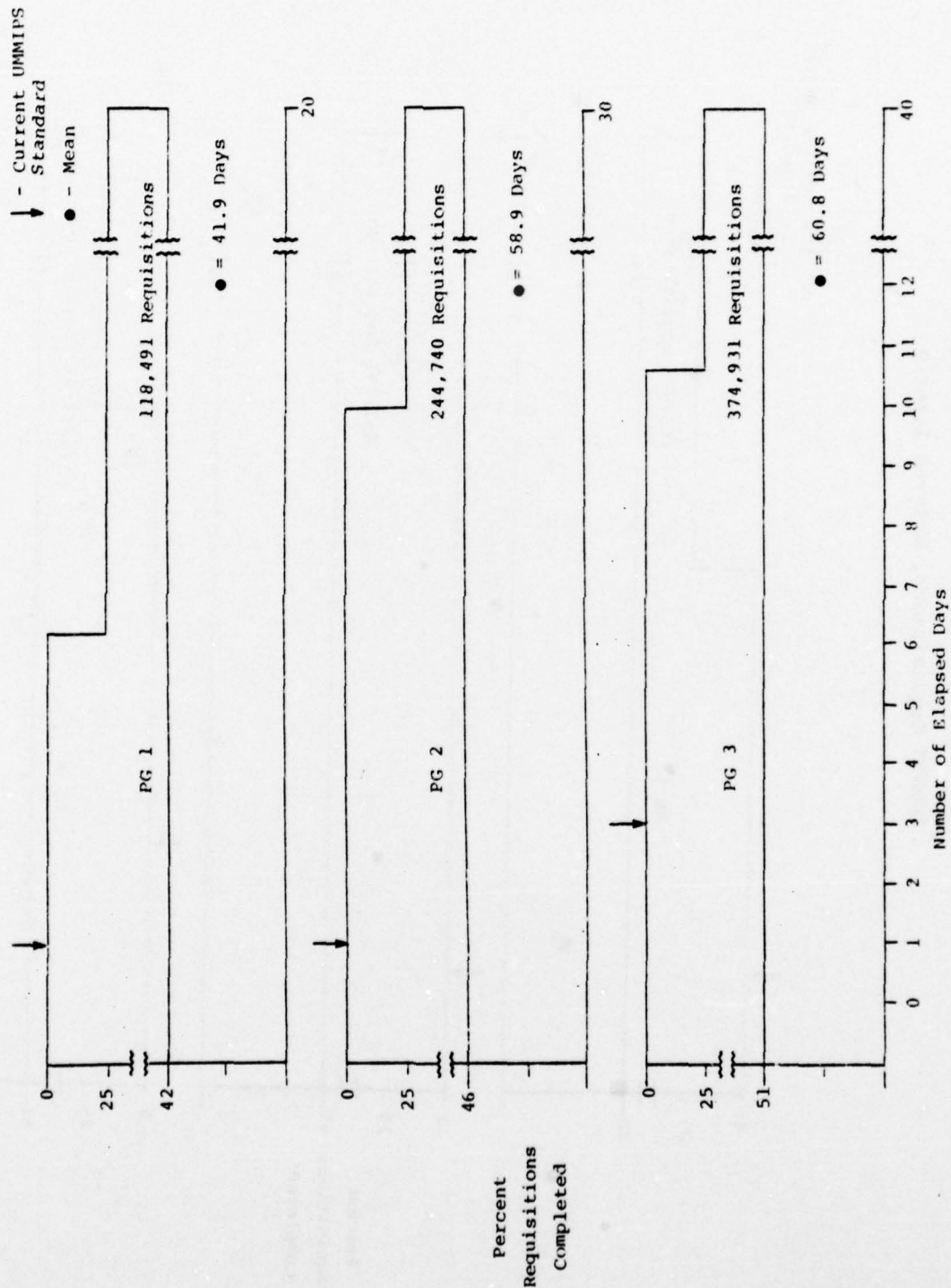


FIGURE 6. DoD INVENTORY CONTROL POINT PROCESSING TIME

(Overseas Requisitions, Delayed Issues)



(Figures 1 and 2) are almost identical, except that the CONUS means decrease as the priority decreases (increases numerically). Manual review of the high priority requisitions is believed to be the primary cause of their longer processing times.

Figures 3 and 4 displayed the CONUS and Overseas immediate issue subcategories, which are all similar. The reason for the similarity is that the majority of those requisitions are processed completely by computer (the exception being the tails as discussed previously). Figures 5 and 6 showed the CONUS and Overseas delayed issue subcategories. Moving from PG 1 down to PG 3, the length of time a requisition is backordered increases for both CONUS and Overseas requisitions. This is to be expected, since more effort is expended to fill the high priority requisitions (those requiring special procurement actions, manual processing, etc.).

There is very little difference in processing costs for requisitions having different priorities; requisitions are processed in virtually the same manner, regardless of priority. Some cost differences do arise in processing high priority requisitions when their volume is large enough to warrant additional processing cycles. Additionally, a greater percentage of high priority requisitions may be processed manually, which also increases their processing costs.

## 5. Conclusions

Three primary actions can be taken at the ICP: issue stock in response to the requisition, place the requisition on backorder, or review the requisition manually and then perform one of the two previous actions. When stock is issued immediately, the PD of the requisition is of little importance. This is as one would expect, since the purpose of the PD is to allocate scarce resources.

The principal effect of a requisition's priority is twofold: (1) it affects the number of cycles per day that are run to determine asset availability, and (2) it is used to help sequence requisitions for backorder release when stock becomes available. A requisition's priority is more than its assigned PD. Other factors, such as NORS codes or intensive management codes also are used as "priorities." These additional "priorities" are used primarily to determine the sequence for filling backordered requisitions.

Lastly, the reporting of ICP processing time to MILSTEP is misleading, because many requisitions that receive manual processing are classified as immediate issues.

D. DEPOT/STORAGE SITE PROCESSING

1. Definition

The Depot Storage Site Processing segment currently is defined to extend "...from the date that the materiel release or issue instruction (either document or punched card) is transmitted to the depot/storage site until the date that materiel is made available to the transportation officer. This segment includes packaging and packing time as well as holding time for the purpose of shipment planning in the shipping activity." (DoDD 4410.6, p. 2-2)

2. Practices and Procedures

The ways items are picked and packed differs among the Services and their individual depots. There are fewer picking priorities than PDs.

The Army generally processes requisitions in the following order: NORS, PG 1, PG 2, PG 3. PG 3 requisitions may be held in the computer up to three days for consolidation. No PD distinction is made within the NORS grouping. Within a given PG, there is no distinction among the individual PDs. Thus, a priority 03 may be processed before a priority 01. The Navy



follows a similar procedure, except that the NORS indication is not used to sequence depot processing.

The Air Force processes requisitions in the following order: NORS, PG 1, PG 2, PG 3, with no difference among individual priorities within a PG. Low priority Materiel Release Orders (MROs), PG 3, may be held in the computer up to seven days for consolidation and shipment planning.

The Marine Corps differs from the other Services, processing requisitions on a first-come-first-served basis. This is primarily due to the low volume of MROs processed. If volume were to increase substantially, items would be picked on a PD basis.

DLA ignores the NORS coding and processes requisitions solely on the basis of PG.

All the Services and DLA operate their depots on a 24-hour-day, 7-day-week basis. However, actual processing (picking and packing) takes place on a normal 40-hour-week basis. For the rest of the time, skeleton crews man the depots, to cover emergencies, and no processing is generally done.

Processing procedures vary from depot to depot within a given Service. Individual depots alter their processing procedures to fit the needs of their primary users. Some depots process high priority and NORS items two or three times per day (i.e., interrupt the processing of low priority items with high priority and NORS items that have come in during the day). Others process all high priority items first, then move on to the low priority items.

### 3. Time Standards and Performance

Analysis of MILSTEP data for fiscal 1976 shows that depot performance for all the Services generally is good. Seventy-five percent or better of the requisitions processed are completed within the prescribed

UMMIPS timeframes (one, two, and eight days for PGs 1, 2, and 3, respectively). Marine Corps' PG 1 requisitions are an exception. Even though 75 percent or more of the requisitions are processed within UMMIPS time standards, the mean times sometimes are greater than the standards.

Figure 7 (DLA example) explains this phenomenon. There are extremely long tails for processing times. The relatively few items in the tail (25 percent or less) take, in some cases, more than 20 days. In DLA's case, this corresponds to nearly 6,200 requisitions taking longer than 20 days in the Depot/Storage Site Processing segment. The tails are caused by several factors such as: computer failures, lost or misplaced items, care and preservation, etc.

#### 4. Relative Time and Costs

Since most processing within the depot is coordinated by computer, the differences in processing costs among the various PGs are small. Those that do occur are due to high PG requisitions being processed (picked and packed) on a shorter cycle time than low PG requisitions.

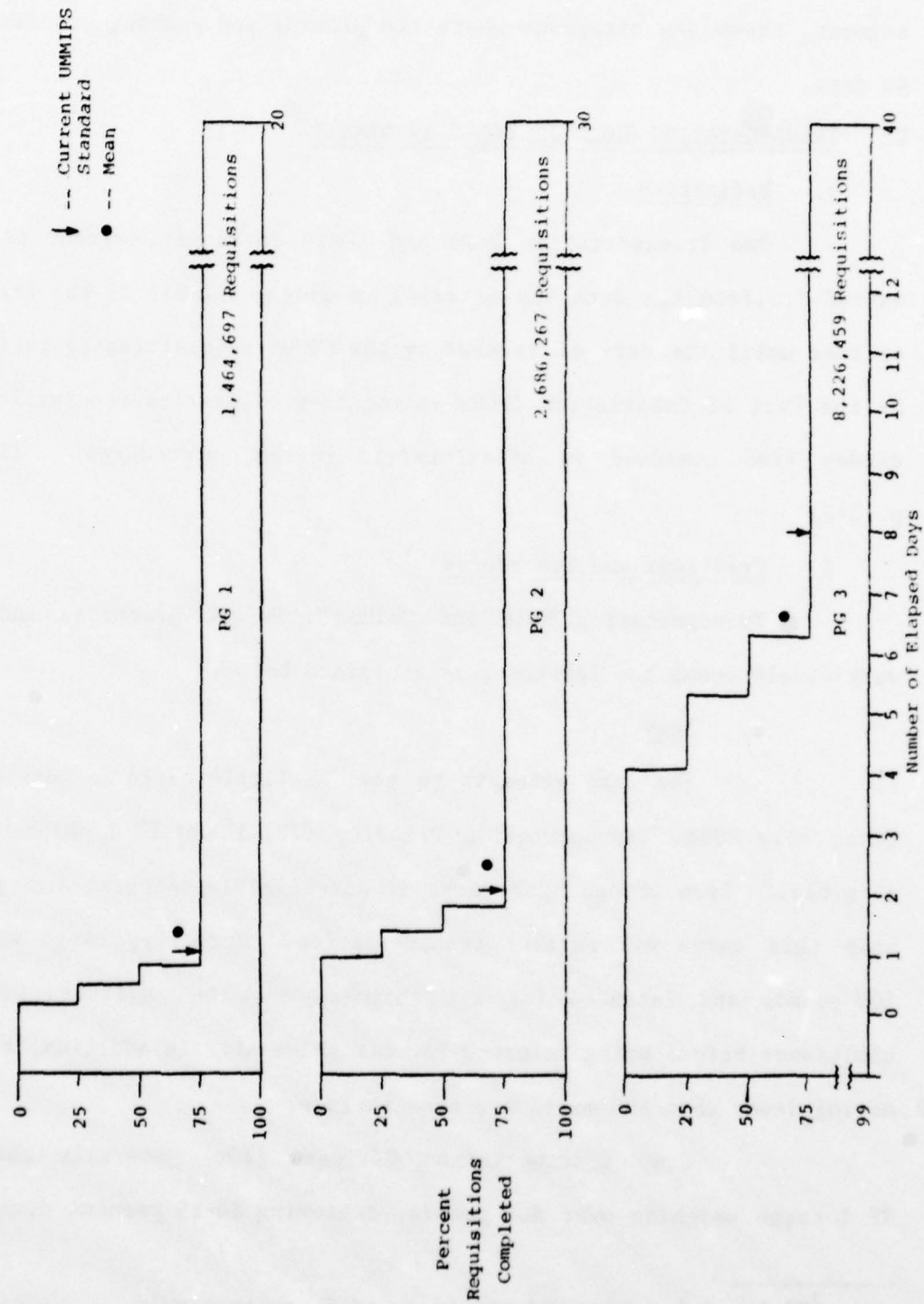
Time differences among priorities can be attributed to increased consolidation of PG 3 requisitions. Those requisitions are consolidated for both the picking procedure and shipment planning.

#### 5. Conclusions

The processing of MROs within the depot does not depend on the 15 PDs. In practice, there are at most four priorities for depot processing: NORs coding and PGs 1, 2, or 3. If the requisition is for a NORs and NORs coding is used as a picking priority, the PD is not recognized. Similarly, the PD is not distinguished within a specific PG.

There is little difference in processing time between PGs 1 and 2. The longer processing time for PG 3 is caused by holding requisitions in the

FIGURE 7. DLA DEPOT/STORAGE SITE PROCESSING TIME



computer for consolidation and shipment planning. Although 75 percent of all requisitions meet UMMIPS time standards for the Depot/Storage Site Processing segment, there are occasions where the picking and packing process can exceed 40 days.

E. TRANSPORTATION HOLD AND CONUS INTRANSIT

1. Definition

The Transportation Hold and CONUS Intransit segment is defined to extend "...from the date the materiel is made available to the transportation officer until the date of receipt by the CONUS requisitioning installation or by the Port of Embarkation (POE) in the case of oversea requisitions. It includes time consumed in offer/traffic release procedures." (DoDD 4410.6, p. 2-2)

2. Practices and Procedures

Transportation Hold and CONUS Intransit practices and procedures vary widely among the Services, as explained below.

a. Army

The Army attempts to move as little cargo as possible via air. Thus, only NORS, Transportation Priority (TP) 1 and TP 2 shipments are air-eligible.<sup>3</sup> Even though TP 2 cargo is air-eligible, general Army policy is to ship this cargo via surface transportation. Normally, cargo weighing over 500 pounds and intended for air shipment must be confirmed with the requisitioner before being released for air shipment. In addition, all shipments moving fewer than 500 miles are sent surface.

Army Transportation Officers (TOs) generally challenge only TP 1 cargo weighing over 500 pounds, achieving 80-85 percent diversion rates.

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<sup>3</sup>TP 1 and 2 correspond to PGs 1 and 2, respectively.



One TO interviewed challenged all shipments justified for air transportation on the basis of transportation priority. Based upon these challenges, a 90-95 percent rate of diversion to surface transportation was achieved. This amounted to a transportation savings of \$1,802,526 for CONUS shipments, and \$395,280 for the CONUS portion of overseas shipments from 1 July 1976 through 31 December 1976. The downgrading of air-eligible items means that they are transported in accordance with PG 3 time standards. This helps the TO statistically, since it is easier to meet the PG 3 time standards than the PG 1 time standards.

Parcel Post is used for many items. If an item meets parcel post size and weight limitations, it is shipped automatically parcel post, regardless of priority. The Army sends approximately 27 percent of the total number of lines shipped by parcel post. Unfortunately, insufficient data were available to compare parcel post costs to those for other transportation modes.

b. Navy

The Navy's transportation policies are different from those of the Army. This difference is due primarily to the Navy's dedicated (contract) transportation system, Quick Transportation (QUICKTRANS). The QUICKTRANS system is intended to reduce inventory levels and transport high priority items (NORS, TP 1, and TP 2) rapidly. QUICKTRANS is viewed as a free-flow system, since shipments within it normally are not subject to challenge nor paid for by the TO. Shipments are not challenged because the Service is contracted and paid for, regardless of the volume of materiel transported. The only shipments that are challenged are those where the cargo is greater than 500 pounds or of outsize dimensions.

Even though QUICKTRANS is a "free" service to the TO, it is under-utilized. The dedicated aircraft have a utilization rate of 70-80 percent, while the dedicated trucks have a utilization rate of only 20-30 percent. A plausible explanation for this low utilization rate is the lack of formal shipment planning procedures. The TO plans shipments, using past experience to anticipate the cargo load and to consolidate cargo accordingly. This generates more shipments than would otherwise be required if extensive shipment planning were done. Thus, shipments which could have moved via QUICKTRANS, move at either less than truckload or commercial air rates.

Only NORS and non-NORS priority 01-08 requisitions are eligible for air transportation. However, many PG 2 items are shipped by surface transportation depending on size, weight, and distance.

The use of parcel post within the Navy is similar to that in the Army. All materiel (regardless of priority) meeting parcel post size and weight limitations automatically moves as parcel post shipments (this may also contribute to the low QUICKTRANS utilization rate). Lack of appropriate time and cost data for parcel post precluded its comparison with other transportation modes.

c. Air Force

Air Force policy dictates that all high investment reparable, NORS, TP 1 and TP 2 materiel be air eligible. This materiel is challenged only if it exceeds 500 pounds, is of outsize dimensions, is excessive in quantity, or if the requisition is more than 90 days old.

The Air Force's CONUS movement of materiel is centered around the Logistics Air (LOGAIR) system. The primary objective of LOGAIR is to reduce inventory levels through shortened pipeline time for high investment

reparables (regardless of priority).<sup>4</sup> LOGAIR also is intended to transport high priority cargo (NORS, TP 1 and TP 2) rapidly, with low priority cargo (TP 3) to be used as filler whenever possible.

Since LOGAIR is also a contract service, its use is "free" to the individual TO. Thus, TOs try to transport as much materiel via LOGAIR as possible. The Air Force's shipment planning system (Shipment Document Release and Control System-D009) enables them to respond easily to the need for high investment shipments, while holding duplicate shipments to a minimum. Minimizing duplicate shipments, in effect, increases consolidation, which in turn, increases use of the LOGAIR system.

Low priority surface shipments also are consolidated on a computerized basis. They are held up to seven days to effect maximum consolidation.

Both parcel post and the United Parcel Service are used by the Air Force. As in the Army and Navy, materiel within established size and weight limitations is transported by either parcel post or UPS. Once again, parcel post time and cost data were unavailable.

d. Marine Corps

The Marine Corps' principal transportation mode is parcel post. Ninety-eight percent of all PG 1 requisitions and 85 percent of the total number of documents are shipped parcel post.<sup>5</sup>

To reduce air shipments, only TP 1 cargo is air eligible. Thus, less than 1 percent of the total number of documents are shipped by

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<sup>4</sup>High investment reparables constitute two-thirds of the materiel moved through the LOGAIR system.

<sup>5</sup>A document refers to the shipping authorization, such as a Bill of Lading.

air. Also, TP 1 cargo greater than 70 pounds is challenged and largely diverted to surface transportation (70-80 percent).

e. DLA

DLA moves TP 1 cargo by air. TP 2 cargo normally moves via surface transportation, unless the requisition is in response to a NORS condition, in which case air transportation will be utilized. TP 1 cargo normally is subject to challenge. DLA currently is achieving an 80 percent diversion rate. DLA shipments moved via LOGAIR or QUICKTRANS are not subject to challenge.

DLA performs extensive shipment planning through the Mechanization of Freight Packing and Shipping Terminal (MOFAST) system. The MOFAST system tracks MROs from the time they are first received at the depot, through the Depot Processing segment, into the formation of consolidated shipments.

3. Time Standards and Performance

Current DoD regulations prescribe time standards of 3, 6, 13, and 13 days for PGs 1, 2, 3, and commercial SEAVAN Service (SEAVAN) shipments, respectively. The performance of each Service and DLA are discussed separately below.

a. Army

Analysis of the MILSTEP 1B reports indicates that the mean time for the Transportation Hold and CONUS Intransit segment exceeds the UMMIPS standard for PGs 1 and 2 for both air and surface shipments. The mean processing time for PG 3 falls within the UMMIPS standard for both air and surface shipments. The MILSTEP 1B report also shows that there are extensive tails to this segment. CONUS transportation time (regardless of priority or



mode of shipment) often exceeds 20 days (see Figure 8), thus increasing the mean transportation time.

The transportation time tails can be explained in a number of ways. Challenge of an air shipment increases the time consumed in the Transportation Hold and CONUS Intransit segment. Entering incorrect dates in the Intransit Data Cards (IDCs) also can cause an overstatement of time. Another factor is that shipments bound for overseas transport must first pass through the Army's Central Consolidation Point (CCP) where the time for overseas shipment consolidation is assessed against the Transportation Hold and CONUS Intransit segment.

Analysis of Figure 8 and Tables 4-9 shows a small difference in actual intransit time among the three PGs for the Army, regardless of transportation mode. The primary difference in Transportation and CONUS Hold Intransit time among the PGs is caused by increased hold times for the lower priority groups. The surface CONUS Intransit time for the overseas shipments is considerably longer than the corresponding air transportation times. This is caused by CONUS surface shipments passing through the CCP enroute to a POE, which inflates the actual CONUS Intransit time.

b. Navy

The Navy's surface transportation times are much shorter than the corresponding air transportation times, regardless of priority. The mean surface intransit times are 0.6, 1.6, and 4.3 days for PGs 1, 2, and 3, respectively. This is in contrast to air intransit times of 10.5, 8.8, and 7.6 days for PGs 1, 2, and 3, respectively. (see Table 5). There are two primary reasons for the shorter surface transportation times: (1) items coded for local delivery automatically are assigned surface transportation times of

FIGURE 8. ARMY SURFACE HOLD PLUS INTRANSIT TIME

(CONUS Ledger, FY 76)

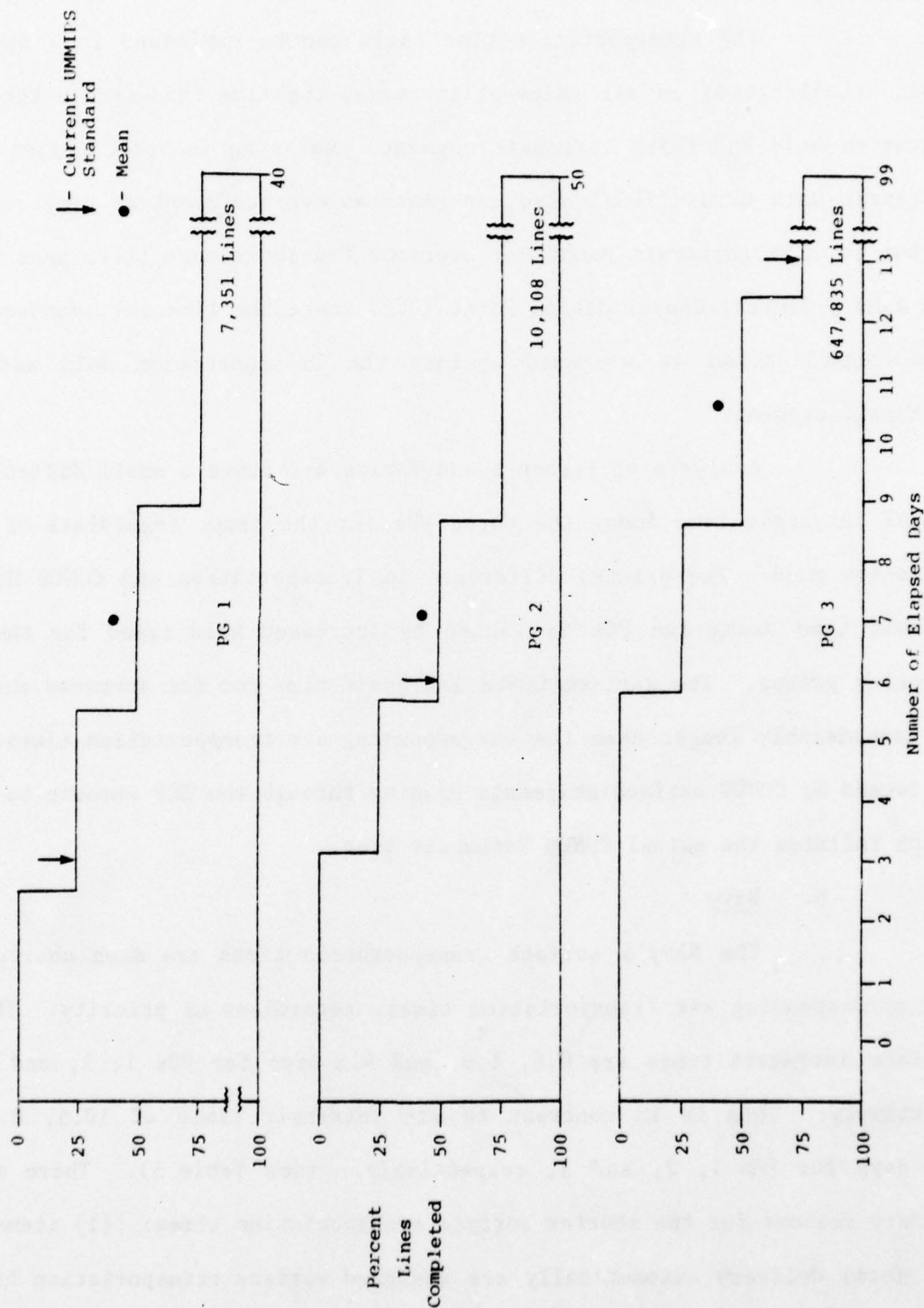


TABLE 4. MEAN HOLD TIME FOR CONUS SHIPMENTS, FY 76

(Number of Elapsed Days)

|                 | Army  |        |         | Navy    |           |           | Air Force |         |         | Marine Corps |      |       | DLA    |         |           |
|-----------------|-------|--------|---------|---------|-----------|-----------|-----------|---------|---------|--------------|------|-------|--------|---------|-----------|
|                 | PG 1  | PG 2   | PG 3    | PG 1    | PG 2      | PG 3      | PG 1      | PG 2    | PG 3    | PG 1         | PG 2 | PG 3  | PG 1   | PG 2    | PG 3      |
| SURF            | 2.1   | 1.8    | 3.8     | 0.6     | 0.8       | 1.3       | 1.7       | 1.7     | 2.7     | 5.2          | 10.8 | 12.2  | 3.3    | 4.5     | 6.0       |
| Number of Days  |       |        |         |         |           |           |           |         |         |              |      |       |        |         |           |
| ACFE            | 7,351 | 10,108 | 647,835 | 421,211 | 1,055,450 | 2,017,965 | 20,833    | 31,713  | 349,768 | 165          | 903  | 3,128 | 57,830 | 204,540 | 1,456,110 |
| Number of Lines |       |        |         |         |           |           |           |         |         |              |      |       |        |         |           |
| AITR            | 1.1   | 1.0    | 2.3     | 1.4     | 3.3       | 2.6       | 0.0       | 0.0     | 0.0     | 2.0          | 0.0  | 0.0   | 1.7    | 1.9     | 5.6       |
| Number of Days  |       |        |         |         |           |           |           |         |         |              |      |       |        |         |           |
| Number of Lines | 7,304 | 6,219  | 5,111   | 10,389  | 11,568    | 563       | 366,118   | 219,348 | 254,296 | 2            | 0    | 0     | 24,993 | 14,859  | 17,988    |

TABLE 5. MEAN INTRANSIT TIME FOR CONUS SHIPMENTS, FY 76

(Number of Elapsed Days)

|                 | Army  |        |         | Navy    |           |           | Air Force |         |         | Marine Corps |      |       | DIA    |         |           |
|-----------------|-------|--------|---------|---------|-----------|-----------|-----------|---------|---------|--------------|------|-------|--------|---------|-----------|
|                 | PG 1  | PG 2   | PG 3    | PG 1    | PG 2      | PG 3      | PG 1      | PG 2    | PG 3    | PG 1         | PG 2 | PG 3  | PG 1   | PG 2    | PG 3      |
| SURFACE         |       |        |         |         |           |           |           |         |         |              |      |       |        |         |           |
| Number of Days  | 5.0   | 5.3    | 6.8     | 0.6     | 1.6       | 4.3       | 5.1       | 6.5     | 8.3     | 8.1          | 7.3  | 3.2   | 8.6    | 9.0     | 9.1       |
| Number of Lines | 7,351 | 10,108 | 647,835 | 421,211 | 1,055,450 | 2,017,965 | 20,833    | 31,713  | 349,768 | 165          | 908  | 3,198 | 57,830 | 204,540 | 1,456,110 |
| AIR             |       |        |         |         |           |           |           |         |         |              |      |       |        |         |           |
| Number of Days  | 4.6   | 5.4    | 5.0     | 10.5    | 8.8       | 7.6       | 3.6       | 4.1     | 4.2     | 4.0          | 0.0  | 0.0   | 4.4    | 4.8     | 4.8       |
| Number of Lines | 7,304 | 6,219  | 5,111   | 10,389  | 11,568    | 563       | 366,118   | 219,348 | 254,296 | 2            | 0    | 0     | 24,993 | 14,859  | 17,988    |



TABLE 6. MEAN HOLD AND INTRANSIT TIME FOR CONUS SHIPMENTS, FY 76

(Number of Elapsed Days)

| SURFACE | Number of Days  | Army  |        |         | Navy    |           |           | Air Force |         |         | Marine Corps |      |       | DLA    |         |           |
|---------|-----------------|-------|--------|---------|---------|-----------|-----------|-----------|---------|---------|--------------|------|-------|--------|---------|-----------|
|         |                 | PG 1  | PG 2   | PG 3    | PG 1    | PG 2      | PG 3      | PG 1      | PG 2    | PG 3    | PG 1         | PG 2 | PG 3  | PG 1   | PG 2    | PG 3      |
| A I R   | Number of Days  | 7.0   | 7.1    | 10.6    | 0.8     | 1.9       | 4.6       | 6.7       | 8.1     | 11.0    | 13.4         | 18.2 | 15.5  | 11.8   | 13.5    | 15.0      |
|         | Number of Lines | 7,351 | 10,108 | 647,835 | 421,211 | 1,055,450 | 2,017,965 | 20,833    | 31,713  | 349,768 | 165          | 908  | 3,193 | 57,830 | 204,540 | 1,456,110 |
| A I R   | Number of Days  | 5.7   | 6.4    | 7.3     | 11.3    | 11.5      | 9.2       | 3.6       | 4.1     | 4.2     | 6.0          | 0.0  | 0.0   | 6.1    | 6.8     | 10.5      |
|         | Number of Lines | 7,304 | 6,219  | 5,111   | 10,389  | 11,568    | 563       | 366,118   | 219,348 | 254,296 | 2            | 0    | 0     | 24,993 | 14,859  | 17,988    |

TABLE 7. MEAN HOLD TIME FOR CONUS PORTION OF OVERSEAS SHIPMENTS, FY 76

(Number of Elapsed Days)

|         |                 | Army  |       |        | Navy  |        |        | Air Force |        |        | Marine Corps |      |      | DLA   |        |        |
|---------|-----------------|-------|-------|--------|-------|--------|--------|-----------|--------|--------|--------------|------|------|-------|--------|--------|
|         |                 | PG 1  | PG 2  | PG 3   | PG 1  | PG 2   | PG 3   | PG 1      | PG 2   | PG 3   | PG 1         | PG 2 | PG 3 | PG 1  | PG 2   | PG 3   |
| SURFACE | Number of Days  | 1.6   | 1.6   | 3.8    | 21.6  | 13.9   | 11.9   | 10.9      | 8.5    | 3.2    | 17.2         | 12.8 | 15.6 | 6.4   | 12.6   | 8.2    |
|         | Number of Lines | 500   | 5,700 | 58,300 | 300   | 61,100 | 21,800 | 200       | 200    | 18,900 | <50          | 100  | 100  | 1,400 | 10,000 | 88,900 |
| AIR     | Number of Days  | 2.4   | 2.4   | 3.1    | 1.4   | 2.9    | 3.1    | 0.1       | 0.1    | 0.2    | 7.0          | 8.8  | 7.9  | 3.9   | 5.9    | 5.4    |
|         | Number of Lines | 4,700 | 4,700 | 7,900  | 6,900 | 15,600 | 600    | 13,500    | 28,000 | 5,000  | <50          | <50  | <50  | 7,500 | 55,000 | 4,100  |
| SEAVAN  | Number of Days  |       |       | 2.0    |       |        | 18.4   |           |        | 3.9    |              |      | 0.0  |       |        | 11.6   |
|         | Number of Lines |       |       | 23,000 |       |        | 62,600 |           |        | 3,000  |              |      | 0    |       |        | 20,500 |

TABLE 8. MEAN INTRANSIT TIME FOR CONUS PORTION OF OVERSEAS SHIPMENTS, FY 76

(Number of Elapsed Days)

|  | S<br>U<br>R<br>F<br>A<br>C<br>E | Army  |       |        | Navy  |        |        | Air Force |        |        | Marine Corps |      |      | DIA   |        |        |
|--|---------------------------------|-------|-------|--------|-------|--------|--------|-----------|--------|--------|--------------|------|------|-------|--------|--------|
|  |                                 | PG 1  | PG 2  | PG 3   | PG 1  | PG 2   | PG 3   | PG 1      | PG 2   | PG 3   | PG 1         | PG 2 | PG 3 | PG 1  | PG 2   | PG 3   |
|  | Number<br>of<br>Days            | 18.0  | 12.6  | 16.6   | 130.7 | 93.7   | 66.9   | 12.0      | 14.0   | 14.0   | 10.1         | 6.8  | 8.7  | 33.3  | 8.8    | 10.2   |
|  | Number<br>of<br>Lines           | 500   | 5,700 | 58,300 | 300   | 6,100  | 21,800 | 200       | 200    | 18,900 | <50          | 100  | 100  | 1,400 | 10,000 | 88,900 |
|  | Number<br>of<br>Days            | 5.9   | 6.6   | 7.9    | 8.9   | 10.6   | 51.3   | 3.5       | 3.9    | 4.5    | 5.7          | 86.5 | 46.1 | 6.6   | 9.3    | 3.7    |
|  | Number<br>of<br>Lines           | 4,700 | 4,700 | 7,900  | 6,900 | 15,600 | 600    | 13,500    | 28,000 | 5,000  | <50          | <50  | <50  | 7,500 | 55,000 | 4,100  |
|  | Number<br>of<br>Days            |       |       | 11.1   |       |        | 33.8   |           |        | 15.9   |              |      | 0.0  |       |        | 6.6    |
|  | Number<br>of<br>Lines           |       |       | 23,000 |       |        | 62,600 |           |        | 3,000  |              |      | 0    |       |        | 20,500 |

TABLE 9. MEAN HOLD AND INTRANSIT TIME FOR CONUS PORTION OF OVERSEAS SHIPMENTS, FY 76

(Number of Elapsed Days)

|         |                 | Army  |       |        | Navy  |        |         | Air Force |        |        | Marine Corps |      |      | DLA   |        |        |
|---------|-----------------|-------|-------|--------|-------|--------|---------|-----------|--------|--------|--------------|------|------|-------|--------|--------|
|         |                 | PG 1  | PG 2  | PG 3   | PG 1  | PG 2   | PG 3    | PG 1      | PG 2   | PG 3   | PG 1         | PG 2 | PG 3 | PG 1  | PG 2   | PG 3   |
| S U R F | Number of Days  | 19.6  | 14.3  | 20.3   | 152.5 | 107.7  | 78.9    | 22.8      | 22.5   | 17.1   | 27.3         | 19.7 | 24.4 | 39.7  | 21.4   | 18.4   |
|         | Number of Lines | 500   | 5,700 | 58,300 | 300   | 6,100  | 121,800 | 200       | 200    | 18,900 | <50          | 100  | 100  | 1,400 | 10,000 | 88,900 |
| A I R   | Number of Days  | 8.3   | 9.0   | 11.0   | 10.3  | 13.6   | 54.5    | 3.6       | 4.0    | 4.7    | 12.7         | 95.3 | 54.0 | 10.5  | 15.3   | 9.2    |
|         | Number of Lines | 4,700 | 4,700 | 7,900  | 6,900 | 15,600 | 600     | 13,500    | 28,000 | 5,000  | <50          | <50  | <50  | 7,500 | 55,000 | 4,100  |
| S E A V | Number of Days  |       |       | 13.1   |       |        | 52.2    |           |        | 19.8   |              |      | 0.0  |       |        | 18.2   |
|         | Number of Lines |       |       | 23,000 |       |        | 62,600  |           |        | 3,000  |              |      | 0    |       |        | 20,500 |



0, 1, or 3 days, for PGs 1, 2, or 3, respectively; and (2) the shorter distance normally traveled by surface transportation compared to air.

Extremely long tails for the Transportation Hold segment of overseas shipments were found. Mean surface intransit times of 130.7, 93.7, and 66.9 days for PGs 1, 2, and 3, respectively, were found in the MILSTEP reports. Considerable effort was expended, without success, to determine the reasons why 300 PG 1 lines have a mean CONUS Intransit time of 130.7 days.

Analysis of parcel post time performance could not be performed because IDCs are not placed on parcel post shipments.

c. Air Force

The mean surface transportation times for CONUS shipments are 5.1, 6.5, and 8.3 days for PGs 1, 2, and 3, respectively. This is in contrast to mean air transportation times of 3.6, 4.1, and 4.2 days for the three groups. The differences between the mean air and surface transportation times are 1.6, 2.4, and 4.1 days for PGs 1, 2, and 3. These figures reflect small time differences among PGs within a given transportation mode (with the exception of surface PG 3) and between air and surface transportation.

The MILSTEP 1B reports show extensive tails for both air and surface in the Transportation Hold and CONUS Intransit segment. The tails are caused by such factors as: time consumed in moving cargo to and from air terminals; time consumed in repackaging and repalletizing cargo for LOGAIR shipments; the circular nature of LOGAIR routes, meaning that if a stop is missed, the entire circuit has to be repeated before off-loading; and difficulty gaining clearance into Bayonne (an overseas POE) where carriers may have to wait up to 23 days.

Once again, lack of transportation time data made it impossible to compare parcel post with other transportation modes.

d. Marine Corps

The Marine Corps' mean hold plus intransit times are longer than those of the other Services (see Table 5). Breaking the Transportation Hold and CONUS Intransit segment into its two components shows that extended hold times are primarily responsible for the length of this segment. The mean surface intransit times are similar for PGs 1 and 2 (8.1 and 7.3 days), with the mean intransit time for PG 3 being much shorter (3.2 days). Only PG 1 items are sent by air, with a mean intransit time of 4.0 days.

The mean hold times for surface shipments are quite long: 5.2, 10.8, and 12.2 days for PGs 1, 2, and 3, respectively. Given the length of these hold times, it can be understood why a very low percentage of the lines shipped meet UMMIPS time standards (less than 25 percent for PGs 1 and 2 and less than 50 percent for PG 3).

The Marine Corps does not report parcel post transportation times. Thus, parcel post could not be compared with other transportation modes. This lack of parcel post data is especially serious due to the high Marine Corps' usage of parcel post (98% of all PG 1 lines and 85 percent of all documents.)

e. DLA

The Transportation Hold and CONUS Intransit times for DLA are longer than those for the Services (except the Marine Corps). The difference is caused by DLA's longer hold times (see Tables 4, 5, and 6). Because of these hold times, less than 25 percent of the CONUS surface lines shipped for PGs 1 and 2 meet UMMIPS time standards.

There is little difference among the mean intransit times for a given transportation mode. PGs 1, 2, and 3 mean times are 4.4, 4.8, and

4.8 for air, and 8.6, 9.0 and 9.1 for surface. The time differences between air and surface are 4.2, 4.2, and 4.3 days for PGs 1, 2, and 3, respectively.

DLA does not report parcel post shipments to MILSTEP. Thus a comparison of parcel post transportation times with those of other shipment modes could not be made.

#### 4. Relative Time and Costs

The principal cause of different CONUS transportation times within a given transportation mode is the increased consolidation of lower priority items. This enables the TO to obtain economies of scale by sending truckload, instead of less-than-truckload, shipments.

Overall, there is little difference in the intransit times among priorities for a given transportation mode. The main difference is between air and surface transportation. Surface transportation can be faster, depending upon the distance. When air transportation is faster, the difference is usually less than four days.

The difference in transportation costs between high and low priority items is attributable to high priority items frequently being moved by air, while low priority items normally are moved by surface modes.<sup>6</sup> Further, the Air Force requires that all high investment items, regardless of requisitioning priority, move by air transportation.

#### 5. Conclusions

The Transportation Hold and CONUS Intransit times are separate, quantifiable segments. They can easily be identified separately (currently they are reported separately and added together in MILSTEP), with the hold

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<sup>6</sup>There are also inventory costs (savings) associated with different transportation modes which need to be taken into account when determining transportation policy.

time identified as "Depot Hold" and the intransit time identified as "CONUS Intransit."

Most data have shown that the difference between air and surface transportation times, regardless of the priority or type of item, is minimal.<sup>7</sup> The significant difference between air and surface transportation is cost. The cost of surface transportation is generally less than one-half of air transportation. Associated with the lower transportation cost (and slightly increased transportation time) is a potentially higher inventory cost to maintain the same level of readiness.<sup>8</sup> The requisitioning unit probably is in the best position to make the tradeoff between air and surface transportation if proper guidelines are established.

One reason for time differences within this processing segment is the additional hold time consumed in consolidating lower priority shipments to achieve lower transportation costs. Again, the requisitioning unit probably is best able to determine if a few more days can be allowed for consolidation. Thus, the requisitioning unit should be able to make it known to the TO that additional time for consolidation is acceptable.

Currently, only the Air Force appears to recognize the economic motivation for air transportation for high investment items. The Army, Navy, and the Marine Corps must recognize the need for air transport of certain high investment type items.

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<sup>7</sup>An exception occurs in the Navy which is caused by coding local delivery transportation times as 0, 1, or 3 days for PGs 1, 2, and 3, respectively.

<sup>8</sup>The potential increase in inventory cost is a function of the cost of the item, its demand rate, its weight, the distance to be shipped, the transportation time difference, the Not Repairable This Station (NRTS) rate, and depot condemnation rates, etc.



Parcel post is an important transportation mode. All the Services use it extensively, but only the Army reports transportation times to MILSTEP.<sup>9</sup>

F. OVERSEA SHIPMENT/DELIVERY

1. Definition

The Oversea Shipment and Delivery time segment is defined to extend "...from the date of receipt of the materiel by a CONUS POE until the date that materiel is delivered to the overseas requisitioning installation. It includes POE hold time, materiel loading time, overseas transit time, materiel unloading time, Port of Delivery (POD) hold time, and intra-theater transit time." (DoDD 4100.6, p. 2-2)

2. Practices and Procedures

The practices and procedures for overseas shipment and delivery are similar for all the Services and DLA. PG 1 cargo normally is air eligible. NORS PG 1 and 2 cargo is also (with the exception of the Marine Corps, in which only PG 1 cargo is air eligible). Non-NORS PG 2 and PG 3 cargo normally is sent by surface transportation. The majority of PG 3 cargo is shipped in SEAVANS, except in the Marine Corps, which had no SEAVAN shipments in FY 76. The Marine Corps transports most of its materiel overseas via parcel post.

3. Time Standards and Performance

Figures 9-11 and Table 10 show that air transportation is required for high priority cargo to meet UMMIPS time standards.<sup>10</sup> Surface transportation normally meets or exceeds the UMMIPS time standards for PG 3 cargo.

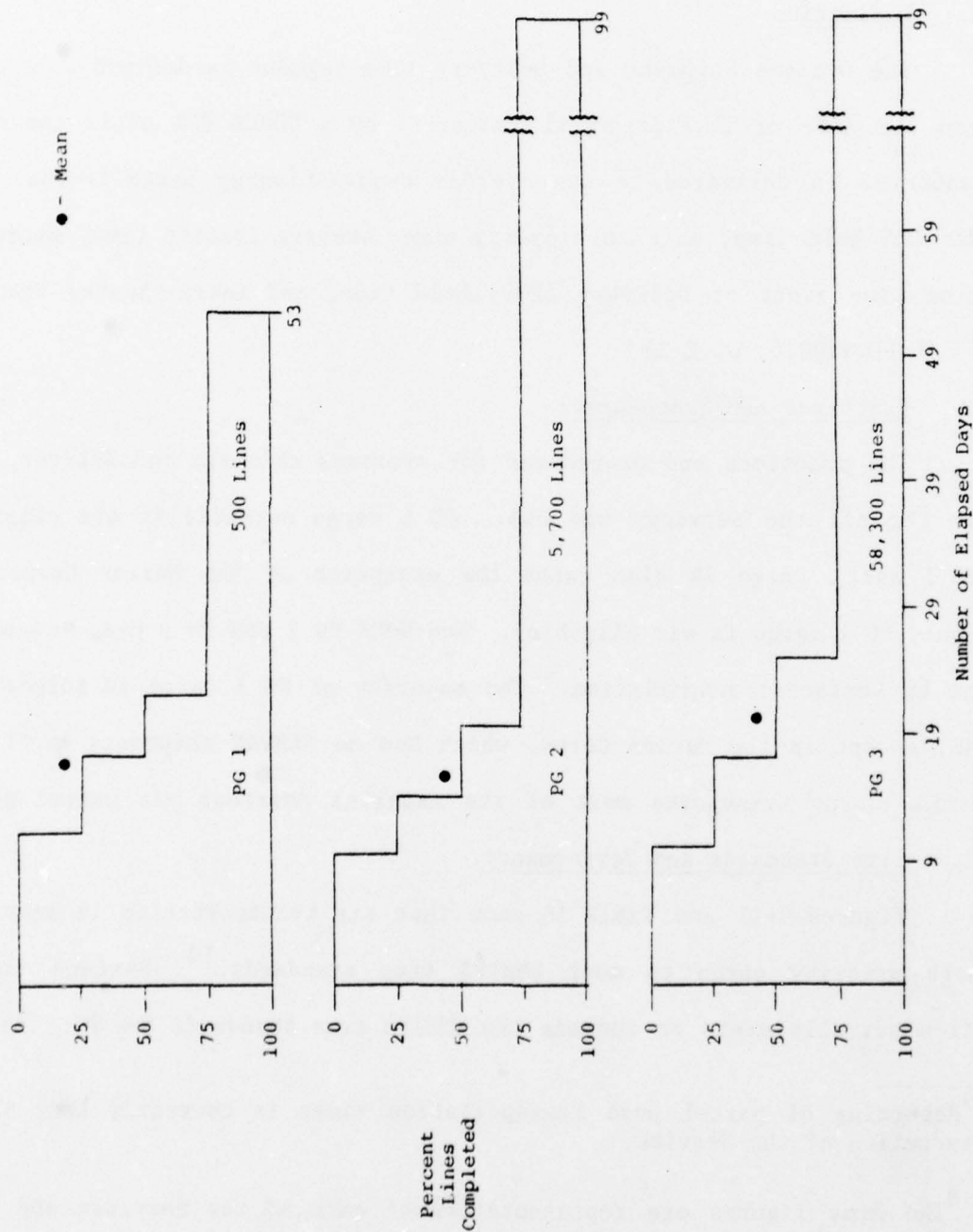
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<sup>9</sup>Reporting of parcel post transportation times is currently left up to the discretion of the Service.

<sup>10</sup>The Army figures are representative of each of the Services and DLA.

FIGURE 9. ARMY SURFACE OVERSEAS SHIPMENT AND DELIVERY TIME

(All Areas, FY 76)

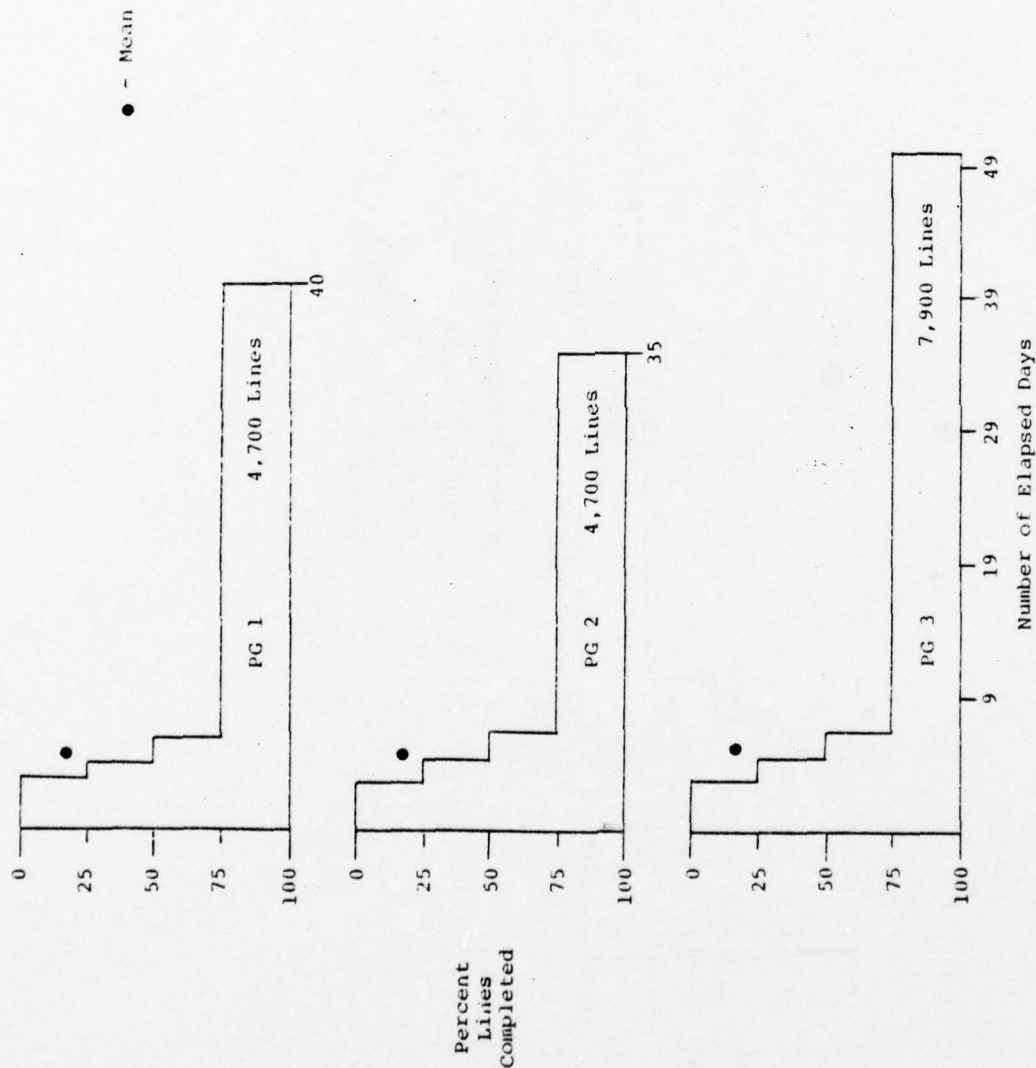


UMMIPS STANDARDS

| GEOGRAPHIC<br>AREAS | PG 1   |        |        | PG 2   |        |        | PG 3   |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                     | AREA 1 | AREA 2 | AREA 3 | AREA 1 | AREA 2 | AREA 3 | AREA 1 | AREA 2 | AREA 3 |
| AREA 1              | 4      | 4      | 5      | 4      | 4      | 5      | 38     | 43     | 53     |
| AREA 2              |        |        |        |        |        |        |        |        |        |
| AREA 3              |        |        |        |        |        |        |        |        |        |

FIGURE 10. ARMY AIR OVERSEAS SHIPMENT AND DELIVERY TIME

(All Areas, FY 76)

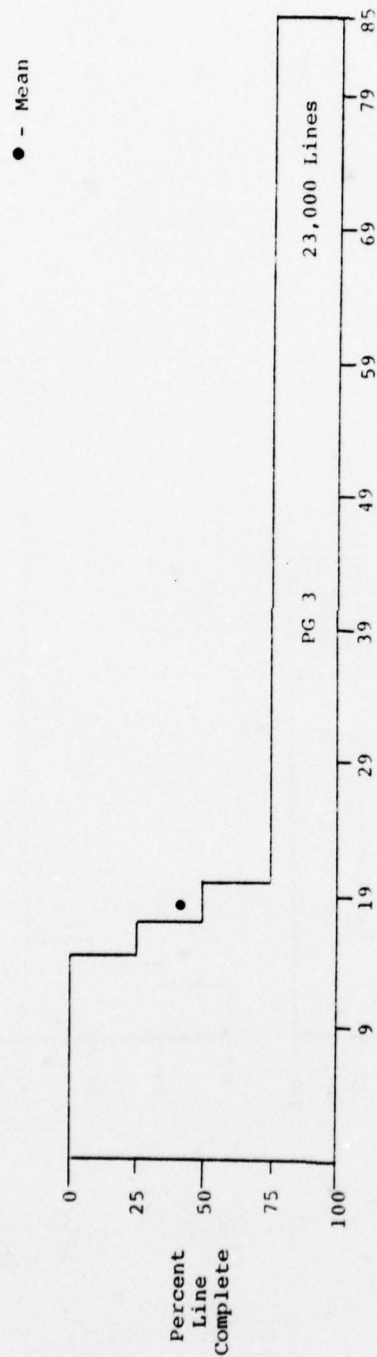


UMMIPS STANDARDS

| GEOGRAPHIC AREAS | PG 1 | PG 2 | PG 3 |
|------------------|------|------|------|
| AREA 1           | 4    | 4    | 38   |
| AREA 2           | 4    | 4    | 43   |
| AREA 3           | 5    | 5    | 53   |

FIGURE 11. ARMY SEAVAN OVERSEAS SHIPMENT AND DELIVERY TIME

(All Areas, FY 76)



Number of Elapsed Days

| UMMIPS STANDARDS |    |
|------------------|----|
| GEOGRAPHIC AREAS |    |
| AREA 1           | 23 |
| AREA 2           | 28 |
| AREA 3           | 38 |



(Number of Elapsed Days, All Areas)

<sup>a</sup>Estimated, due to no MILSTEP entry for the All Area Overseas Shipment/Delivery Time.

Comparison of Figure 9 and Figure 11 shows that the mean SEAVAN shipment times are slightly shorter than the mean non-SEAVAN shipment times. The tails for SEAVAN shipments are shorter than for non-SEAVAN shipments.

The tails for non-SEAVAN shipments for all priorities can be caused by a number of factors, some of which are: extended waiting times at the POE for consolidation, waiting for the sailing date, and materiel having to "catch up to" or follow a unit that it misses at the POD.

#### 4. Relative Time and Costs

As shown by Figures 9-11 and Table 10, the differences in transportation time for the three PGs, given the mode of transportation and Service, are very small. The main differences in transportation time become apparent when air and surface times are compared. The mean time for air transportation varies from 4.5 to 6.8 days; the mean surface time varies from 9.9 to 35.5 days.

Differences in transportation costs depend upon the mode of shipment. In other words, two identical items-one requested high priority, the other low priority-would cost roughly the same amount if shipped by air. PG 3 cargo shipped in SEAVAN containers would be less costly than PG 3 cargo shipped by surface transportation but not in containers.

#### 5. Conclusions

The extensive tails in the Oversea Shipment/Delivery processing segment are caused largely by time spent waiting at the POE for either further consolidation or the sailing date. As stated in F.1 above, the POE hold time is included as a portion of the Oversea Shipment and Delivery time. The time actually consumed for overseas transportation would be reflected more accurately if this segment were split into two segments. The first segment should reflect the POE hold time, the second, the overseas shipment and delivery time.

The large difference between air and surface overseas transportation times justifies the use of air transportation for moving high priority cargo overseas. When low priority cargo (PG 3) is transported overseas, SEAVAN usage works well.

G. RECEIPT TAKE-UP BY REQUISITIONER

1. Definition

The Receipt Take-Up by Requisitioner time segment is defined to extend "...from the date of receipt of the materiel at destination until the date that the materiel is recorded on requisitioner records." (DoDD 4410.6., p. 2-2)

2. Practices and Procedures

The Receipt Take-Up practices and procedures are similar throughout the Services and DLA, except for the Air Force. The Air Force processes the "due-ins" by computer on a high priority to low priority basis. All the other Services process receipts on a first-come-first-served basis. Thus, for the purpose of Receipt Take-Up processing, the priority of the requisition generally is ignored.

3. Time Standards and Performance

The time standards for Receipt Take-Up currently are 1, 1, and 3 days for PGs 1, 2, and 3, respectively.

Neither DLA nor the Services now report the time consumed in Receipt Take-Up to MILSTEP. Since these data are not reported, it is impossible to assess the performance of the Services and DLA with respect to the prescribed time standards.

4. Relative Time and Costs

As mentioned above, the Services generally process Receipt Take-Up

on a first-come-first-served basis, except for the Air Force. Thus, there is little time or cost difference among the different priority groups.

#### 5. Conclusions

Each of the Services and DLA should report Receipt Take-Up time to MILSTEP. Until this is done, it will be impossible to assess accurately the correctness of the current UMMIPS time standards.

#### H. USE OF SEPARATE PEACETIME AND WARTIME PRIORITIES

In the course of our analysis, the establishment of separate PDs and time standards for wartime and peacetime requisitions was considered. That approach is not recommended for the following reasons.

1. The Emergency Priority Category, coupled with present DoD policy on the use of war reserves, is adequate to accommodate the immediate and temporary need for materiel resulting from a contingency.
2. Conditions that would tend to increase processing time in wartime are generally offset by other conditions that would tend to decrease processing time (see Table 11). It is likely that overall processing time would remain the same as for peacetime for high priority requisitions, and might tend to increase slightly for routine requisitions.
3. Activation of different designators or time standards for wartime requisitions could well result in unnecessary confusion and errors during the transition from peacetime to wartime status.



TABLE 11. PEACETIME VS. WARTIME REQUISITION PROCESSING TIME STANDARDS

| CONDITIONS AFFECTING CHANGE FROM PEACETIME TO WARTIME STATUS |  |  |  |
|--|--|--|--|
| PROCESSING SEGMENT   | INCREASED TIME   | DECREASED TIME   | PROBABLE RESULT  |
| Requisition Submission                                       | Communications breakdown<br>Mail delivery breakdown<br>Less frequent delivery<br>Greater volume  | 24-hour/7-day processing for routine requisitions<br>Larger quantities requisitioned | Same time  |
| ICP Processing   | Greater volume   | 24-hour processing   | Same time  |
| Depot Processing   | Greater volume   | High volume, more efficient<br>24-hour processing                                    | Same time  |
| Transportation Hold, CONUS                                   | Greater volume<br>Less available commercial vehicles   | Less hold time required for routine requisitions<br>Greater use of military vehicles | Same time  |
| CONUS Intransit  | Greater volume<br>could cause delay in unloading   | 24-hour unloading capability   | Same time  |
| POE/APOE Hold  | Greater volume<br>Less available vehicles<br>Less frequent departure due to escort and convoy requirements<br>Personnel shortage                           | More SEAVAN condolidation at depot<br>Greater use of military vehicles and personnel | Same time for High Priority to increase time for Routine Requisitions  |
| OVERSEAS Shipment and Delivery                               | Less direct routes<br>Greater POD distance to intra-theatre stockpoint<br>Greater volume resulting in greater unloading time<br>Inadequate port facilities | Greater use of airlift<br>Greater use of military personnel                          | Same time for High Priority to increased time for Routine Requisitions |
| Receipt Take-up  | Greater volume   | Greater use of military vehicles and personnel<br>24-hour pick-up capability         | Same time  |

### III. RECOMMENDATIONS

#### A. PROPOSED PRIORITY STRUCTURE

The preceding analysis of UMMIPS processing segments, in particular the Transportation Hold and CONUS Intransit segment, identified high rates of diversion from air to surface shipment. Challenges commonly resulted in diversion rates of 80 to 90 percent. Such high rates indicate the requisitioner's willingness to accept additional transportation time, once assured that a claim had been placed on the asset. In other words, the requisitioner used a high PD to prevent backordering of the item, and not to indicate the desired transportation mode. Thus, in some instances, the requisitioner may be willing to allow the TO extra time for shipment consolidation to reduce transportation costs. In other instances, the requisitioner may not want the TO to consolidate the shipment or even to ship the materiel by surface transportation. Simply put, air transportation may be required.

A priority system to meet the requisitioner's needs, must allow him to specify the need for the materiel in terms of (1) the competing claims upon assets, and (2) the speed with which the materiel is needed, once asset availability has been determined.

Recommendation 1. Establish an Issue Priority Designator (IPD). This designator will indicate the relative importance of a requisition for the issuance of stock only.

Recommendation 2. Establish a Processing and Transportation Designator (PTD). This designator will indicate the mode of shipment and the allowable consolidation time.

A requisition's PD, then, is composed of an IPD and a PTD.

The IPD is a combination of the requisitioning unit's FAD and UND. For the IPDs to be meaningful, the sets of actions taken in response to an IPD

must differ for each. Therefore, each FAD category must be unique, and each UND category must be unique. However, for purposes of UMMIPS, there appears to be no difference between FADS IV and V.<sup>1</sup>

Recommendation 3. Combine FADS IV and V for the purpose of determining the UMMIPS IPD only.

In conjunction with Recommendation 3, Table 12 contains the recommended matrix for determining the proper IPD.

TABLE 12. DETERMINATION OF ISSUE PRIORITY DESIGNATOR

UND

| FAD   | E  | A  | B  | C  |
|-------|----|----|----|----|
| I     | 00 | 01 | 04 | 09 |
| II    | 00 | 02 | 05 | 10 |
| III   | 00 | 03 | 06 | 11 |
| IV, V | 00 | 07 | 08 | 12 |

The preceding analysis of UMMIPS processing segments has shown that, except for materiel backorder release, two and sometimes three different actions are taken in response to a requisition's PD. The existence of an informal emergency priority has also been shown. Examples of the use of an emergency priority are: Cuban Missile Crisis, Mid-East War, natural disaster, etc. The number of different actions that may be taken in response to the various priorities, both formal PDs and informal super priorities, leads to Recommendation 4.

Recommendation 4. Establish three major Priority Groups: Emergency, High, and Routine.

The Emergency category is a formalization of existing procedures. For a requisition to qualify for emergency treatment, justification by such authority as the Secretary of Defense or the Joint Chiefs of Staff would be required.

<sup>1</sup>See DoD Directive 4410.6 pages 1-3 and 1-4.

Additionally, justification for emergency processing would be allowed for a specified time period only. The High classification would contain IPDs 01-07 in the new system, which correspond to PGs 1 and 2 in the current UMMIPS system. The Routine group would contain IPDs 08-12, which correspond to the existing PG 3.

Within the High and Routine categories, subcategories need to be codified so that the requisitioner may request precisely the type of service required.

Recommendation 5. Establish six subcategories, three within the High category and three within the Routine category. These subcategories would precisely specify the mode of transportation and the amount of consolidation time. They would be indicated by the PTD.

The PTD would be denoted by a lower case alphabetic character. The subcategories for the High classifications are: Premium, Standard, and Discount. The subcategories for the Routine classification are: Premium Air, Premium Surface, and Standard. The Premium Air and Premium Surface categories are for High Investment Repairables only. These two subcategories provide for the required tradeoff between pipeline costs and transportation/ consolidation savings.

The High category and its three subcategories would provide the requisitioner with the following choices:

1. Premium (PTD a) - would provide minimum consolidation time, air transportation<sup>2</sup> both CONUS and overseas, and a charge for the CONUS air shipment.
2. Standard (PTD b) - would provide minimum consolidation time, surface transportation within CONUS, and air transportation overseas.
3. Discount (PTD d) - would provide moderate consolidation time for which the requisitioner would receive a credit, surface transportation within CONUS, and air transportation overseas.

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<sup>2</sup>If the distance to be travelled within CONUS is less than 1000 miles, the shipment will move by surface transportation. The reason is that for such a short distance air and surface transportation times are approximately the same.



The Routine category and its three subcategories would provide the requisitioner with the following choices:

1. Premium Air (PTD c) - would provide moderate consolidation time, air transportation both within CONUS and overseas for high investment repairables. Economic justification for the CONUS air transportation segment must be provided.
2. Premium Surface (PTD d) - would provide moderate consolidation time, surface transportation within CONUS, and air transportation overseas for high investment repairables.
3. Standard (PTD e) - would provide the maximum allowable consolidation time, and surface transportation within CONUS and overseas.

Table 13 is a summary of the recommended structure of these categories and subcategories.

The reader should note the provision for charges and credits associated with PTD a and d (High Discount only), respectively. The charges are intended as a control to prevent the requisitioner from always requesting air transportation even when it is not needed. The credits are intended to provide the requisitioner with an incentive for allowing the TO additional time for consolidation. An actual transfer of funds does not necessarily have to be made. It may be sufficient simply to keep track of the amounts of charges or credits that are incurred and report them to the commanding officer. Thus, the procedure could be a device for controlling the unjustified use of air transportation.

#### B. PROPOSED REDEFINITION OF REQUISITION PROCESSING SEGMENTS

The requisition processing segments were set up to allow management visibility and control of the UMMIPS. Analysis of the segments has demonstrated that, with the current definitions, it is difficult for management to maintain visibility (and thus control) over the processing actions. To improve control, it is necessary to divide some segments and, in one case,

TABLE 13. RECOMMENDED PRIORITY GROUPS, SUBGROUPS  
AND PRIORITY DESIGNATORS

| Priority Category                        | Emergency | High    |          |          | Routine                       |                               |          |
|--|-----------|---------|----------|----------|-------------------------------|-------------------------------|----------|
|  |           | Premium | Standard | Discount | Premium                       |                               | Standard |
|  |           |         |          |          | Air                           | Surface                       |          |
| Issue Priority Designator                | 00        | 01-07   | 01-07    | 01-07    | 08-12                         | 08-12                         | 08-12    |
| Processing and Transportation Designator | o         | a       | b        | d        | c                             | d                             | e        |
| Consolidation Time                       | Emergency | Minimum | Minimum  | Moderate | Moderate                      | Moderate                      | Maximum  |
| CONUS Transportation Mode                | Fastest   | Air     | Surface  | Surface  | Air                           | Surface                       | Surface  |
| Overseas Transportation Mode             | Fastest   | Air     | Air      | Air      | Air                           | Air                           | Surface  |
| Type of Items                            | All       | All     | All      | All      | High In-vestment Repair-ables | High In-vestment Repair-ables | All      |
| Justification                            | Yes       | No      | No       | No       | Yes                           | Yes                           | No       |
| Charge                                   | No        | Yes     | No       | No       | No                            | No                            | No       |
| Credit                                   | No        | No      | No       | Yes      | No                            | No                            | No       |

combine two segments. Each processing segment and the changes recommended for it is discussed individually below.

1. Requisition Submission and Passing Action

The analysis of this segment pointed out: (1) the difficulty in ascertaining when it begins; (2) a probable cause for the processing time tails (mode of transmittal); (3) the superfluousness of the Passing Action segment; and (4) the minimal difference in processing the different priorities. To clarify the beginning of this segment and establish a uniform method of dating requisitions throughout the Services, the following recommendation is made.

Recommendation 6. Define the Requisition Submission segment to begin with the actual date the requisitioner requests and is denied materiel from the initial retail supply source.

The mode of requisition transmittal and whether the requisition is from overseas appear to be the primary causes of the extensive delays in requisition processing. Three categories of requisition submission are recommended to facilitate control and provide a more accurate view of the processing time required.

Recommendation 7. Establish three categories of requisition submittal, each with its own time standard. The categories are: (1) requisitions submitted via AUTODIN without exception data; (2) CONUS requisitions submitted via means other than AUTODIN, with or without exception data; and (3) overseas requisitions submitted via other than AUTODIN, with or without exception data.

The Navy is the only Service to report and use the Passing Action segment. Its need for an interpretation of that segment is doubtful.

Recommendation 8. Eliminate the Passing Action processing segment and redefine the requisition submission segment to include the time required to route a requisition to the correct CONUS ICP if it has been incorrectly addressed.

## 2. ICP Availability Determination

The ICP processing segment was found to be clearly defined. However, two problem areas were discovered: (1) the classification of requisitions as immediate and deferred issues, and (2) the use of many more than the 15 PDs prescribed in the UMMIPS directive.

The Immediate and Deferred issues subcategories were examined because excessive processing time tails were found in the All Issues category. The primary reason for the tails in the immediate subcategory is the definition of an immediate issue. Requisitions are, for the most part, classed as immediate issues if stock is issued the first time the requisition is passed against the asset availability records. Thus, a requisition that is reviewed manually, consuming several days of processing time, would be classified as an immediate issue if stock were issued when the requisition was finally passed against the availability records. This practice distorts the measurement of ICP performance. The following recommendation is made to improve that measurement.

Recommendation 9. Classify requisitions in the ICP processing segment as: Immediate Issues, Deferred Issues, and Delayed Issues.

The Immediate Issue subcategory should consist of requisitions issued on a first pass basis and not subject to delay for any reason. The Deferred Issues subcategory should consist of requisitions reviewed manually (for any reason) and still issued on the first pass. The Delayed Issues subcategory should thus consist of requisitions that have resulted in back-ordering.

As stated previously, the ICPs use many more priorities than the 15 currently prescribed in the UMMIPS. The FADs and UNDs were constructed so that when combined they reflect the requisitioner's relative importance. The Joint Chiefs of Staff have specified a units importance through the FAD;



the requisitioner specifies his urgency of need through the UND. There is no need for additional issue priorities, with the exception of the emergency priority. This especially applies to the use of NORS coding, which is contained, by definition, in the UND A category.

Recommendation 10. Eliminate the use of all priority designators other than those explicitly codified in the UMMIPS.

3. Depot/Storage Site Processing

The definition of this segment in the UMMIPS suggests that more than one type of operation is being performed. In addition to the depot operations of picking, packaging, and packing, this segment contains "holding time for the purpose of shipment planning in the shipping activity" (DoDD 4410.6, p. 2-2). The MILSTEP data analyzed suggest that a large part of the difference between PGs is due to the additional consolidation time employed for PG 3 requisitions. Management visibility of depot operations would be improved if the depot processing time were separated from the holding time for shipment planning.

Recommendation 11. Separate the Depot/Storage Site Processing segment into two segments: Depot/Storage Site Processing and Depot Hold for Transportation.

This recommendation removes the shipment planning hold time from the current Depot/Storage Site Processing segment and places it in the Depot Hold for Transportation segment. The Depot Hold for Transportation would also contain some additional time, as specified in the next recommendation.

4. Transportation Hold and CONUS Intransit

The name and current definition of this processing segment indicates that more than one type of operation is contained and measured. The Transportation Hold and CONUS Intransit processing segment includes both the

time consumed in shipment consolidation by the depot and in CONUS transportation. The inclusion of these two separate operations under one time standard inhibits measurement of the performance of each operation.

Recommendation 12. Separate the Transportation Hold and CONUS Intransit segment into two segments: Depot Hold for Transportation and CONUS Intransit, each with its own processing time standards.

The hold time segment would then contain the shipment planning hold time formerly in the Depot/Storage Site Processing segment and any other consolidation hold time incurred by the TO prior to release to a carrier. The CONUS intransit segment would reflect only the CONUS transportation time. Implementation of this recommendation should be very easy, since the hold time and transportation time currently are reported both separately and together in MILSTEP.

The inclusion of more than one operation in the Transportation Hold and CONUS Intransit segment has reduced management visibility over the performance of the Services with respect to UMMIPS time standards. Further reduction in management visibility is caused by the complete lack of transportation processing time data for materiel shipped parcel post.<sup>3</sup>

Recommendation 13. Require the Military Services and DLA to report parcel post transportation time to MILSTEP.

#### 5. Oversea Shipment/Delivery

The Oversea Shipment/Delivery segment contains more than one processing action; it includes POE hold, materiel loading, and oversea transportation times. The largest amounts of time usually are consumed by the POE hold time (consolidation time) and the actual overseas transportation time. Because these two operations are in the same processing segment, it is difficult for management to gauge the performance of either.

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<sup>3</sup>The Army reports parcel post transportation times to MILSTEP.

Recommendation 14. Separate the Oversea Shipment/Delivery Segment into two segments: Port of Embarkation (POE/APOE) Hold and Oversea Shipment/Delivery, each with its own processing time standard.

The effect of this recommendation would be to improve management visibility over the time consumed in both the hold and oversea transportation activities.

6. Receipt Take-Up by Requisitioner

The definition of this segment explicitly states the time to be measured. However, none of the Services currently measures or reports this time to MILSTEP. In order to assess Service performance and the adequacy of the current time standard, data must be made available.

Recommendation 15. Require the Military Services to measure and report to MILSTEP time consumed in the Receipt TakeUp by Requisitioner time segment.

C. PROPOSED REVISION OF TIME STANDARDS

The analysis of Service and DLA performance with respect to current UMMIPS processing time standards in chapter II leads to the recommendation that new standards be developed reflecting the IPD and PTD. Recommended time standards for each processing segment are presented in the following sections.

1. Requisition Submission

In examining present time standards for Requisition Submission, it would be advisable to consider requisitions submitted via AUTODIN first. Air Force performance data are the most realistic in this case, since they are consistent with boundaries stated in chapter II B, and since approximately 90 percent of the requisitions are transmitted via AUTODIN. Table 14 shows FY 76 performance time for all Air Force requisitions submitted. With the exception of PG 3 requisitions originating overseas, 75 percent of the requisitions in each PG are submitted in one day or less. This finding, coupled

TABLE 14. AIR FORCE REQUISITION SUBMISSION: FY 76 PERFORMANCE VS. STANDARD

| Category              | Total No.<br>of Req's.<br>(1000s) | % of A.F.<br>Total | % of A.F.<br>CONUS or<br>Overseas | % of A.F.<br>P.G. | Mean Days<br>for<br>Completion | Mean Days<br>for 75%<br>Completion | Current<br>Standard<br>(Days) |
|-----------------------|-----------------------------------|--------------------|-----------------------------------|-------------------|--------------------------------|------------------------------------|-------------------------------|
| <u>A. F. Total</u>    | <u>1719.5</u>                     | <u>100.0</u>       |                                   |                   |                                |                                    |                               |
| <u>A. F. CONUS</u>    | <u>1362.0</u>                     | <u>79.21</u>       | <u>100.00</u>                     |                   | <u>1.7</u>                     | <u>0.9</u>                         |                               |
| PG 1                  | 270.5                             | 15.73              | 19.86                             | 75.56             | 2.3                            | 1.0                                | 2                             |
| PG 2                  | 356.0                             | 20.70              | 26.14                             | 75.56             | 2.3                            | 1.0                                | 2                             |
| PG 3                  | 735.5                             | 42.77              | 54.00                             | 84.45             | 1.2                            | 0.8                                | 4                             |
| <u>A. F. Overseas</u> | <u>357.5</u>                      | <u>20.79</u>       | <u>100.00</u>                     |                   | <u>5.2</u>                     | <u>3.7</u>                         |                               |
| PG 1                  | 87.5                              | 5.09               | 24.48                             | 24.44             | 2.2                            | 0.8                                | 2                             |
| PG 2                  | 134.6                             | 7.83               | 37.65                             | 27.44             | 2.7                            | 1.0                                | 2                             |
| PG 3                  | 135.4                             | 7.87               | 37.87                             | 15.55             | 9.4                            | 8.2                                | 4                             |



with an analysis of the AUTODIN transmittal process, leads to the conclusion that one day is a realistic standard for requisitions submitted via AUTODIN from both CONUS and overseas.

Establishing realistic time standards on the basis of past performance is not easily accomplished for requisitions requiring exception data. However, four assumptions seem reasonable. One, the time required to prepare and process exception data should be the same for requisitions originated in CONUS and those originated overseas. Two, the actual time for transmittal via message and telephone should be slightly greater (perhaps one day) for overseas requisitions than for CONUS requisitions. Three, the time required for mail transmittal in CONUS should not average more than three days longer than message or telephone transmittal, and not more than five days longer from overseas. Four, high priority requisitions with exception data normally will be transmitted by telephone or message, while routine requisitions will be transmitted by mail.

It seems reasonable to expect preparation and processing time for a requisition containing exception data to be no more than two days--one day at the transmitting end and one day at the receiving end. Further, when transmittal is by message or telephone within CONUS, transmittal time should not exceed one day. Therefore, based on the assumptions above, realistic time standards are indicated in Tables 15 and 16, which constitute Recommendation 16.

## 2. ICP Availability Determination

The analysis in chapter II showed little difference among priorities in processing procedures for this segment. Additionally, 75 percent of the requisitions are processed within one day. Processing times greater than one day are caused primarily by backordering or the need for manual review.

TABLE 15. RECOMMENDED REQUISITION SUBMISSION PROCESSING TIME STANDARDS

(RECOMMENDATION 16)

| <u>Requisition Submission</u> | <u>Time Standard</u> |                |
|-------------------------------|----------------------|----------------|
|                               | <u>High Priority</u> | <u>Routine</u> |
| 1) AUTODIN (Standard Format)  | 1                    | 1              |
| *2) Exception Data, CONUS     | 3                    | 6              |
| *3) Exception Data, Overseas  | 4                    | 9              |

\* Time Standards for these categories should be applied when AUTODIN facilities are not available even though the requisition includes no exception data.

TABLE 16. RECOMMENDED EMERGENCY REQUISITION SUBMISSION PROCESSING TIME STANDARDS

(RECOMMENDATION 16)

| <u>Requisition Submission</u> | <u>Time Standard</u> |
|-------------------------------|----------------------|
|                               | <u>Emergency</u>     |
| 1) AUTODIN (Standard Format)  | 0.125                |
| 2) Exception Data, CONUS      | 0.125                |
| 3) Exception Data, Overseas   | 0.250                |

Judging from the processing time graphs in chapter II, the minimum time for an asset availability determination appears to be 0.125 days (3 hours). This leads to Recommendation 17.

Recommendation 17. Set a processing time standard of 1 day for High and Routine requisitions, and a standard of 0.125 days for Emergency requisitions.

### 3. Depot/Storage Site Processing

The recommended priority structure allows some flexibility within the High priority category for determination of the depot processing time. Specifically, PTDs a and b provide minimum depot processing time, and PTD d provides moderate depot processing time. Analysis of processing time graphs similar to Figure 7 shows that more than 75 percent of the PG 1 requisitions are completed on time. Furthermore, no processing consolidation is done for those requisitions. Thus, a standard of one day for PTDs a and b for this segment is reasonable as a minimum processing time.

To determine the standard for moderate (PTD c and d) depot processing time, it is first necessary to establish the standard for the maximum depot processing time. The maximum time allowed for Depot/Storage Site processing can be determined by again examining Figure 7 (virtually the same as the DoD depot processing time graph) in chapter II. That graph shows that more than 75 percent of the requisitions (MROs) are processed within the current eight-day standard. Thus, the current standard allows sufficient time for computer consolidation of MROs and should be retained for this segment for PTD e.

The standard for moderate depot processing time must now be between the minimum and maximum times. A "compromise" of four days allows the depot sufficient additional MRO consolidation time, while not seriously

lengthening the overall processing time. The High priority requisitioner should receive a discount for allowing such additional consolidation time.

The Emergency priority requires immediate processing. The smallest time in which materiel could be picked, packaged, and packed is on the order of 0.25 days (6 hours).

Recommendation 18. Establish a time standard of 0.25 days for Depot Processing for Emergency requisitions. Additionally, establish time standards of 1, 4, and 8 days for PTDs (a, b), (c, d), and e, respectively.

4. Depot Hold for Transportation

The Transportation Hold time allows the TO time to consolidate shipments and in most cases achieve lower truckload billing rates.<sup>4</sup> The amount of time allowed for consolidation of shipments must reflect the requisitioner's need for the materiel as specified in the PTD.

The High Priority Premium and Standard subcategories indicate that the requisitioner needs the materiel quickly and cannot afford to wait for the TO to consolidate shipments. The High Priority Discount subcategory indicates that the requisitioner needs the materiel but can afford to wait an additional day.

Recommendation 19. Establish Depot Hold for Transportation Standards of 1 day for the High Priority Premium and Standard subcategories and 2 days for the High Priority Discount subcategory.

The Routine Priority category contains two subcategories for high investment items (Premium Air and Premium Surface). For such items, extensive consolidation cannot be afforded.

The Routine Standard subcategory is the normal mode for routine resupply. In it, the TO should be allowed extensive consolidation time.

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<sup>4</sup>Truckload rates are approximately \$0.07 per ton-mile lower than less-than-truckload rates.



Recommendation 20. Establish Depot Hold for Transportation time standards of 2 days for the Routine Priority Premium subcategory and 5 days for the Routine Priority Standard subcategory.

Emergency processing should proceed as quickly as possible. Thus the allowed hold time should be limited to the time required to find a carrier for the materiel.

Recommendation 21. Establish a Depot Hold for Transportation time standard of 0.25 days for the Emergency category.

5. CONUS Intransit

The time standards for CONUS transportation primarily reflect the mode of transportation, i.e., air transportation is faster than surface transportation.

Recommendation 22. Establish CONUS Intransit time standards of 2 days for PTDS a and c, and 4 days for PTDS b and d.

Additional time can be taken for the Routine Standard subcategory (PTD e).

Recommendation 23. Establish a CONUS Intransit time standard of 7 days for the Routine Priority Standard subcategory.

Emergency transportation should take place as expeditiously as possible.

Recommendation 24. Establish a CONUS Intransit time standard of 0.375 days for the Emergency category transportation time.

6. Port of Embarkation (POE/APOE) Hold

Port of Embarkation Hold time was previously included as a portion of the Oversea Shipment/Delivery segment. Separation of the Oversea Shipment/Delivery segment into two segments creates a need for time standards for each segment. All overseas transportation is by air, with the exception of the Routine Priority Standard subcategory (PTD e) which moves by surface transportation (either in SEAVANS or as loose cargo). Given the use of air transportation overseas for all PTDS except e, the APOE hold times should be short and identical. The hold time for PTD e should be long enough to allow material consolidation and packing.

Recommendation 25. Establish Port of Embarkation (POE/APOE) Hold time standards of 2 days for PTDS a, b, c, d and a standard of 13 days for PTD e.

SEAVANs normally are packed at the depots. To allow for depot packing, the Depot Hold time standard should be longer and the POE Hold time shorter.

Recommendation 26. Establish a Depot Hold Time and POE Hold Time standard of 15 and 3 days respectively when SEAVAN consolidation is performed at the depot.

#### 7. Oversea Shipment/Delivery

As pointed out previously, all overseas cargo, with the exception of PTD e, will move by air. The analysis in chapter II showed that, once the mode of shipment is chosen, the transportation times to a given geographic region are approximately the same, regardless of priority.<sup>5</sup>

Recommendation 27. Establish Oversea Shipment/Delivery time standards of 4, 6 and 7 days for regions 1, 2, and 3, respectively, for PTDS a, b, c, and d.

The same logic suggests a separate time standard for PTD e for each region.

Recommendation 28. Establish Oversea Shipment/Delivery time standards of 25, 30, and 40 days for regions 1, 2, and 3, respectively, for PTD e.

#### 8. Receipt Take-Up by Requisitioner

Lack of data for this segment precluded analysis of performance. Consequently, we are unable to make any recommendations as to changing the time standards for this segment.

#### 9. Summary

The recommended priority structure and its associated time standards are summarized in Table 17. Included as an appendix is a proposed revision of the UMMIPS Directive incorporating all of our recommendations.

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<sup>5</sup>There are three geographic regions: (1) Western Hemisphere, (2) Europe, Mediterranean, or Africa, and (3) Western Pacific.

TABLE 17. RECOMMENDED TIME STANDARDS

|   |                                   | TIME STANDARDS (CALENDAR DAYS) |       |       |       |         |       |       |
|---|-----------------------------------|--------------------------------|-------|-------|-------|---------|-------|-------|
|   |                                   | Emer-<br>gency                 | HIGH  |       |       | ROUTINE |       |       |
| Priority Category   |                                   |                                | PRE.  | STD.  | DIS.  | PREMIUM |       | STD.  |
| Issue Priority Designator   |                                   |                                |       |       |       | AIR     | SUR.  |       |
| Processing and Transportation Designator  |                                   | 00                             | 01-07 | 01-07 | 01-07 | 08-12   | 08-12 | 08-12 |
|   |                                   | 0                              | a     | b     | d     | c       | d     | e     |
| P<br>R<br>O<br>C<br>E<br>S<br>S<br>I<br>N<br>G<br><br>S<br>E<br>G<br>M<br>E<br>N<br>T | A. Requisition Submission         |                                |       |       |       |         |       |       |
|   | 1. AUTODIN                        | .125                           | 1     | 1     | 1     | 1       | 1     | 1     |
|   | 2. Other CONUS                    | .125                           | 3     | 3     | 3     | 3       | 3     | 6     |
|   | 3. Other Overseas                 | .25                            | 4     | 4     | 4     | 4       | 4     | 9     |
|   | B. ICP Availability               | .125                           | 1     | 1     | 1     | 1       | 1     | 1     |
|   | C. Depot Processing               | .25                            | 1     | 1     | 4     | 4       | 4     | 8     |
|   | D. Depot Hold                     | .25                            | 1     | 1     | 2     | 2       | 2     | 5*    |
|   | E. CONUS Intransit                | .375                           | 2     | 4     | 4     | 2       | 4     | 7     |
|   | CONUS Seg.                        | 1.125                          | 6     | 8     | 12    | 10      | 12    | 22    |
|   | F. POE/APOE Hold                  | .25                            | 2     | 2     | 2     | 2       | 2     | 13*   |
|   | G. Overseas Shipment/<br>Delivery |                                |       |       |       |         |       |       |
|   | 1. West. Hemisphere               | .50                            | 4     | 4     | 4     | 4       | 4     | 25    |
|   | 2. Europe, Med., Africa           | .75                            | 6     | 6     | 6     | 6       | 6     | 30    |
|   | 3. West. Pacific                  | 1.25                           | 7     | 7     | 7     | 7       | 7     | 40    |
|   | H. Receipt Take-Up                | .25                            | 1     | 1     | 1     | 1       | 1     | 3     |
|   | TOTAL CONUS                       | 1.375                          | 7     | 9     | 13    | 11      | 13    | 25    |
|   | TOTAL OVERSEAS                    |                                |       |       |       |         |       |       |
|   | 1. West. Hemisphere               | 2.125                          | 13    | 15    | 19    | 17      | 19    | 63    |
|   | 2. Europe - Africa                | 2.375                          | 15    | 17    | 21    | 19      | 21    | 68    |
|   | 3. West. Pacific                  | 2.875                          | 16    | 18    | 22    | 20      | 22    | 73    |

\*When SEAVAN consolidation is accomplished at the depot, the Depot Hold Time is 15 days, and the POE Hold Time Standard is 3 days.

NOTE: Only AUTODIN summations are shown.



APPENDIX  
PROPOSED REVISION OF UMMIPS DIRECTIVE

NUMBER 4410.6

ASD (MRA&L)

## Department of Defense Directive

### SUBJECT Uniform Materiel Movement and Issue Priority System (UMMIPS)

- Refs.: (a) DoD Directive 4410.6, "Uniform Materiel Movement and Issue Priority System (UMMIPS)," February 18, 1971 (hereby cancelled)
- (b) DoD Directive 4500.9, "Transportation and Traffic Management," November 29, 1971
- (c) DoD Instruction 4400.1, "Priorities and Allocations-Delegation of DO and DX Priorities and Allocations Authorities, Rescheduling of Deliveries and Continuance of Related Manuals," November 16, 1971
- (d) DoD Instruction 5000.8, "Glossary of Terms Used in the Areas of Financial, Supply and Installation Management," June 15, 1961
- (e) DoD Directive 5000.9, "Standardization of Military Terminology," August 20, 1969
- (f) DoD Instruction 4140.33, "Grouping of Secondary Items for Supply Management Purposes," June 12, 1968
- (g) DoD Instruction S-4410.3, "Policies and Procedures for Implementing Approved National and Military Urgency Determinations (U)," September 12, 1973

#### I. REISSUANCE

This Directive reissues DoD Directive 4410.6 (reference (a)) to provide updated criteria for the Uniform Materiel Movement and Issue Priority System (UMMIPS) which prescribes (1) guidance for the proper ranking of materiel requirements considering the mission importance of the requiring activity and the urgency of need for the materiel; and (2) incremental time standards for requisition processing and materiel movement considering the time of need and the economies associated with processing and movement options.

#### II. CANCELLATION

Reference (a) is hereby superseded and cancelled.

#### III. APPLICABILITY AND SCOPE

The provisions of this Directive apply to the requisitioning, issue and movement of all materiel managed by all DoD Components and, through agreement, to materiel supplied to DoD Components by the General Services Administration.



IV. POLICIES

- A. The UMMIPS will be utilized in logistics operations during peacetime and in war.
- B. There will be three priority categories: 1) Emergency; 2) High; and 3) Routine. Each priority will consist of an Issue Priority Designator (IPD) and a Processing and Transportation Designator (PTD). Criteria for the assignment of those designators and the priority category to which specific designators are applicable are contained in Enclosure 1.
- C. The Emergency Priority category will be used only upon approval of the Secretary of Defense, the Joint Chiefs of Staff or the Heads of DoD Components or upon approval delegated by the Heads of DoD Components based on OSD and JCS guidance.
- D. The Emergency Priority category will be used only on a temporary basis to assure delivery of selected items urgently needed to meet a national emergency or avoid a disaster.
- E. All echelons of logistics management will share the responsibility for maintenance of an effective and credible priority system and will exercise intensive surveillance to insure accurate operating level application of UMMIPS criteria contained in Enclosure 1.
- F. Materiel will be furnished to users on time subject to constraints of resources and capability. The time standards established in Enclosure 2 will be considered overall logistics system limits for the supply of materiel requirements. Operational systems will be designed to meet and, where economically feasible, to surpass the prescribed time standards.
- G. The means of transportation for materiel shall be selected in accordance with the provisions of DoD Directive 4500.9 (reference (b)).
- H. Contracts for deliveries from commercial sources will be governed by the manual issued under provisions of DoD Instruction 4400.1 (reference (c)). Since the materiel required date will provide the interface between UMMIPS and rated industrial order procedures, UMMIPS Priority Designators will not be used as industrial priority ratings and will not be cited to contractors or in contracts.
- J. UMMIPS will be used as an adjunct to Joint Chiefs of Staff (JCS) and Military Service guidance governing overall allocation and ultimate distribution of end items to forces and activities.

V. RESPONSIBILITIES

## A. The Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) shall:

1. Monitor effective implementation of UMMIPS and compliance with established system requirements.
2. Resolve all requests for deviation or exemption from UMMIPS submitted by DoD Components and other agencies.
3. Establish criteria for the allocation of critical materiel in the DoD distribution system to resolve competing requirements between DoD Components and foreign governments or non-DoD federal agencies.
4. Promulgate criteria, in coordination with the JCS, for the use, assignment and monitoring of the Emergency Priority category.
5. Charter periodic reviews of UMMIPS operations (a) to assure consistent interpretation and uniform application of the system at all echelons, (b) to analyze the validity of established time standards, and (c) to improve and simplify UMMIPS.
6. Coordinate policy guidance, instructional memoranda and system requirements within the Office of the Secretary of Defense as appropriate.

## B. The Joint Chiefs of Staff (JCS) shall:

1. Supervise overall implementation of Secretary of Defense guidance on assignment of UMMIPS Force/Activity Designators (FADS) to U. S. and foreign country forces and activities. This responsibility includes:
  - a. Recommending for the approval of the Secretary of Defense (1) the forces, activities, programs or projects to which FAD I should be assigned; and (2) the specific theaters or areas in which forces or activities should be assigned FAD II.
  - b. Assigning FADS to U. S. and foreign country forces to programs and projects based on approved OSD guidance.
  - c. Delegating authority to DoD Components and other agencies, if deemed necessary, to assign FADS II through V to their respective U. S. Forces units.

2. Conduct semi-annual audits of each FAD I and II assignment made by the JCS to ascertain continued validity; and sponsor, as required, joint review of inter-service comparability in the assignment of FADs to selected forces/activities with similar missions.
3. Establish criteria for allocation of critical materiel in the DoD distribution system when competing requirements among DoD components cannot be resolved by the DoD Components.
4. Establish criteria and procedures based on OSD guidance for the assignment of the Emergency Priority category, and delegate authority to DoD components and other agencies, if necessary, to approve such assignment.

C. Heads of DoD Components shall:

1. Issue criteria and procedures for the assignment of the Emergency Priority category based on OSD and JCS guidance.
2. Designate a single office of primary responsibility to act as focal point for:
  - a. Monitoring the assignment of FADs II through V to units in the DoD Component if such authority has been granted by the JCS.
  - b. Reviewing and validating the utilization of the Emergency Priority category by units in the DoD Component to assure compliance with DoD policy.
  - c. Monitoring the utilization of the UMMIPS throughout the DoD Component.
  - d. Evaluating all suggested UMMIPS changes originating in the DoD Component.
  - e. Developing and submitting to the ASD(MRA&L) a DoD Component position on all system revision proposals.
3. Develop and publish implementing regulations which
  - (a) conform to the criteria outlined herein and
  - (b) are clear, understandable and easily applied at the operating levels where UMMIPS is utilized.
4. Conduct continuing internal training programs to assure effective operation and accurate applications of the system.

5. Maintain programs of command and administrative audits and inspections to review internal operations with the objective of eliminating and preventing abuses, mis-application and misinterpretation of UMMIPS.
  6. Enforce accurate use of UMMIPS through appropriate disciplinary action for deliberate misuse of the system.
  7. Conduct a semiannual review of the propriety of FADs assigned to units in the DoD Component.
  8. Provide representation to joint development efforts and periodic evaluations of UMMIPS.
- D. The General Services Administration has agreed to act as UMMIPS focal point for non-DoD federal agencies and will implement UMMIPS through publication in the FEDSTRIP Operating Guide.

VI. EFFECTIVE DATE AND IMPLEMENTATION

- A. This Directive is effective immediately for planning purposes and will be implemented on January 1, 1979.
- B. Two copies of implementing instructions shall be forwarded to the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) within sixty (60) days. In addition, a copy of all implementing instructions and interpretive correspondence shall be exchanged upon issuance with each DoD Component and the Director, Joint Staff (JCS).

Deputy Secretary of Defense

Enclosures - 2

1. UMMIPS Criteria
2. UMMIPS Time Standards



UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY SYSTEM  
CRITERIA

I. INTRODUCTION

- A. In satisfying materiel requirements, it is necessary to identify the relative importance of competing demands for logistics system resources such as transportation, warehousing, paperwork processing and materiel inventories. The UMMIPS provides a ready basis for expressing the relative rank of requisitions and materiel movement transactions by a combination of two priority designators arranged into three priority categories. The priority categories are: 1) Emergency; 2) High; and 3) Routine. The priority designators are: 1) Issue Priority Designator (IPD) which is represented by a two-digit numeric code; and 2) Processing and Transportation Designator (PTD) which is represented by a single lower case alphabetic character. The IPD provides a means of assigning relative ranking to competing demands among Forces/Activities for critical or short supply items and for filling backorders. The PTD provides a means of determining the allowable time for requisition processing, shipment consolidation and transportation based on the time of need and the economies associated with processing and transportation options. The increasing use of automatic data processing systems in handling supply and transportation information makes this codification of precedence essential to the operation of the DoD Distribution system.
- B. The Issue Priority Designator is based upon a combination of factors which relate the mission of the requisitioner (Force/Activity Designator) and the urgency of need or the end use (Urgency of Need Designator). The Force/Activity designator (a Roman numeral) is assigned by the Secretary of Defense, the Joint Chiefs of Staff (JCS) or a DoD Component; the Urgency of Need Designator (an alphabetic character) is determined by the requisitioning activity. With certain exceptions as outlined herein, these two factors will enable the requisitioning activity to determine the Issue Priority Designator (Arabic numeral).
- C. The Processing and Transportation Designator (PTD) is determined by the requisitioning activity based on guidance promulgated by each DoD Component with regard to incremental time/cost differences among PTD options for each Priority category. General guidance regarding incremental time/cost differences is provided herein based on overall DoD average processing and transportation costs as related to the time standards established in Enclosure 2. Guidance also is provided for the use of PTDs for the retrograde movement of reparable and excesses.

D. Applicable terms used in this Directive are published in DoD Instruction 5000.8 (reference (d)) and DoD Directive 5000.9 (reference (e)). For purposes of UMMIPS, the following additional terms are defined:

1. Auxiliary Equipment: Equipment which supplements mission-essential materiel or takes the place of such materiel should it become inoperative. (This equipment will be specifically identified by the DoD Component.)
2. Force/Activity: A unit, organization or installation performing a function or mission; a body of troops, ships, or aircraft, or a combination thereof; a function, mission, project, or program, including Military Assistance Program (MAP) Grant Aid or Sales.
3. Force/Activity Designator (FAD): A Roman numeral (I to V) assigned by the Secretary of Defense, the Joint Chiefs of Staff, or the DoD staff, or the DoD Components to indicate the mission essentiality of a unit, organization, installation, project or program to meet national objectives.
4. Intensive Management Items: Those items of supply identified for "very high" and "high" intensive management by the appropriate materiel manager in accordance with DoD Instruction 4140.33 (reference (f)).
5. High Investment Items: Those items of supply identified by the appropriate materiel manager for expedient processing and transportation in order to achieve economies through reduction in pipeline and wholesale and retail safety level inventories.

E. The overall objective of the UMMIPS time standards is to provide guidance in satisfying a customer's demand within the cumulative time prescribed for the assigned designator. Individual segment standards should not be considered inviolate when subsequent savings in time and improved service can be achieved.

## II. FORCE/ACTIVITY DESIGNATORS (FADs)

- A. As indicated in paragraph I.D.3. above, determination of the FAD is based on Defense importance or mission essentiality. The urgency of need for items is not a factor to be considered. In order to ensure that the unique impact of FAD I requisitions on the supply system is preserved, FAD I assignments are reserved for those units, projects, or forces which are most important militarily in the opinion of the Joint Chiefs of Staff and as approved by the Secretary of Defense. Accordingly, the lowest FAD required to indicate relative importance of the force, activity, unit or project will be assigned. Assignment of lower FADs for segments of organizations, phases or programs, or for individual situations will be made where possible.

B. Designator I will be assigned to:

1. Programs which have been approved for top national priority by the President as set forth in the BRICK-BAT Category of the latest DoD Master Urgency List contained in DoD Instruction S-4410.3 (reference (g)). The automatic FAD ranking will continue after a given program enters operational use as long as that program remains in the BRICK-BAT Category of the DoD Master Urgency List. When a program drops from the BRICK-BAT Category, the use of FAD I may continue for 90 days to allow for the processing of a request, if considered necessary, for determination in accordance with paragraph 2 below. Continuance of the FAD I does not permit continued use of the BRICK-BAT Category or the counterpart DX industrial priority rating since termination in that Category is effective immediately and is carried out as prescribed in the appropriate program directive.
2. Units, projects, or forces, including foreign country forces, which have been specifically designated by the Secretary of Defense on the recommendation of the Joint Chiefs of Staff.

C. Designator II will be assigned to:

1. United States combat, combat ready, and direct combat support forces deployed outside CONUS in specific theaters or areas designated by the Secretary of Defense on the recommendation of the Joint Chiefs of Staff.
2. Those CONUS forces being maintained in a state of combat readiness for immediate (within 24 hours) employment or deployment.
3. DoD Component programs and projects, vital to Defense or national objectives, which are of comparable importance with elements specified in 1. and 2. above.
4. Specified combat ready and direct combat support forces of foreign countries with comparable importance to U.S. Forces specified in 1. and 2. above.
5. Specific identifiable federal agency programs which are vital to Defense or national objectives and so designated by the Secretary of Defense.

D. Designator III will be assigned to:

1. All other U. S. combat ready and direct combat support forces outside CONUS not included under Designator II.
2. Those CONUS forces being maintained in a state of combat readiness for deployment to combat prior to D+30.



3. DoD Component programs and projects which are of comparable importance with elements 1 and 2 above.
4. Specified combat ready and direct combat support forces of foreign countries with comparable importance to forces specified in 1 and 2 above.
5. Specific identifiable federal agency programs designated by the Secretary of Defense.
6. CONUS industrial maintenance and repair activities providing direct logistics support for forces in a state of combat readiness.

E. Designator IV will be assigned to:

1. United States forces being maintained in a state of combat readiness for deployment to combat during the period D+90.
2. DoD Component programs and projects which are of comparable importance with elements specified in 1 above.
3. Specified combat ready and direct combat support forces of foreign countries with comparable importance to U. S. forces specified in 1 above.
4. Federal agency programs which contribute to planned improvement of defense or national objectives and are so designated by the Secretary of Defense.

F. Designator V will be assigned to:

1. All other U. S. forces or activities including staff, administrative and base/post supply type activities.
2. Approved programs of DoD Components and federal agencies not otherwise designated.
3. Forces of foreign countries not otherwise designated.

- G. In order to facilitate optimum materiel readiness, the authorized higher Force/Activity Designator may be assumed by a force or activity at a maximum of ninety days prior to its scheduled deployment outside CONUS or its authorized elevation from a lower to higher Force/Activity Designator.

III. URGENCY OF NEED DESIGNATORS (UND)

- A. Urgency of Need Designator E will be used in requisitioning materiel required for immediate end-use to meet a national emergency or avoid a disaster, but only when the requisitioning activity has been authorized to use the Emergency Priority.



B. Urgency of Need Designator A will be used in requisitioning materiel:

1. Required for immediate end-use and without which the Force/Activity is unable to perform assigned operational missions or such condition will occur within 15 days in the CONUS and 20 days overseas (See Note 1).
2. Required for immediate installation on or repair of mission-essential materiel and without which the Force/Activity is unable to perform assigned operational missions (See Note 1).
3. Required for immediate end-use for installation on or repair of direct support equipment (ground support, fire-fighting, etc.) necessary for the operation of mission-essential materiel (See Note 1).
4. Required for immediate end-use in replacement or repair of mission-essential training materiel and without which the Force/Activity is unable to perform assigned training missions.
5. Required for immediate end-use to effect replacement or repair of essential physical facilities of an industrial/production activity and without which the activity is unable to perform assigned missions.
6. Required for immediate end-use to eliminate an existing work stoppage at industrial/production activities manufacturing, modifying or maintaining mission-essential materiel.
7. Required for immediate end-use to eliminate an existing work stoppage on a production line performing repair and maintenance of unserviceable intensive management/critical items.

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Note 1: Materiel requirements of this nature affect the readiness of mission-essential materiel and actually result in a report of casualty in accordance with equipment readiness information systems authorized by the Office of the Secretary of Defense, the JCS or DoD Component headquarters only.

C. Urgency of Need Designator B will be used in requisitioning materiel:

1. Required for immediate end-use and without which the capability of the Force/Activity to perform assigned operational missions is impaired (see Note 2).
2. Required for immediate installation on or repair of mission-essential materiel and without which the capability of the Force/Activity to perform assigned operational missions is impaired (see Note 2).
3. Required for immediate end-use for installation on or repair of auxiliary equipment.
4. Required for immediate end-use in replacement or repair of mission-essential or auxiliary training equipment and without which the capability of the Force/Activity to perform assigned missions is impaired.
5. Required for immediate end-use to effect replacement or repair of essential physical facilities of an industrial/production activity and without which the capability of the activity to perform assigned missions is impaired.
6. Required to preclude an anticipated work stoppage at industrial/production activities manufacturing, modifying or maintaining mission-essential materiel.
7. Required to preclude an anticipated work stoppage on a production line performing repair and maintenance of un-serviceable intensive management/critical items.
8. Required for the immediate replacement of the safety level quantity of mission-essential items on allowance/load lists (e.g., Prescribed Load Lists, Spares Kits, Station Sets, Coordinated Shipboard Allowance Lists) where the last item has already been issued out-of-bin to end-use.
9. Required for immediate stock replenishment at overseas forward area supply activities when customer mission essential stock levels go below the safety level and stock due in is not anticipated to arrive prior to stock on hand reaching a zero balance. The quantity ordered should be minimum amount sufficient to insure keeping a positive stock balance until due in materiel arrives.

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Note 2: Materiel requirements of this nature directly affect the capability of the Force/Activity to perform its mission; it can temporarily accomplish assigned missions and tasks but with effectiveness and efficiency below the DoD Component headquarters-determined level of acceptable readiness.

D. Urgency of Need Designator C will be used in requisitioning materiel:

1. Required for on-schedule repair/maintenance/manufacture or replacement of all equipment.
2. Required for replenishment of stock to meet authorized stockage objectives.
3. Required for purposes not specifically covered by any other Urgency of Need Designator.

#### IV. ISSUE PRIORITY DESIGNATORS

- A. Through the combination of the assigned Force/Activity Designators and the appropriate Urgency of Need Designator, an Issue Priority Designator can be ascertained by the requisitioning activity. The following table indicates the appropriate two-digit Arabic number for an Issue Priority Designator derived from a combination of a given Roman numeral Force/Activity Designator with one of the four alphabetical Urgency of Need Designators. It should be noted that any Force/Activity could be permitted to use the Emergency Priority Designator if the situation demands and such authority is granted. Normally, however, each Force/Activity can choose from only three Issue Priority Designators.

##### DERIVATION OF ISSUE PRIORITY DESIGNATORS

(Relating Force/Activity Designators to Urgency of Need)

| <u>FORCE/ACTIVITY DESIGNATOR</u> | <u>URGENCY OF NEED DESIGNATOR</u> |          |          |          |
|----------------------------------|-----------------------------------|----------|----------|----------|
|                                  | <u>E</u>                          | <u>A</u> | <u>B</u> | <u>C</u> |
| I . . . . .                      | 00                                | 01       | 04       | 09       |
| II . . . . .                     | 00                                | 02       | 05       | 10       |
| III . . . . .                    | 00                                | 03       | 06       | 11       |
| IV & V . . . . .                 | 00                                | 07       | 08       | 12       |

- B. When assets are available, stocks will be committed in low to high order of the Issue Priority Designator within the prescribed time standards established in Enclosure 2. When assets are not available, stocks will be committed in low to high order of the Issue Priority Designator for all accumulated backorders at the time assets are received. Once stocks have been committed, although not released to a transportation carrier, they will not be reclaimed to satisfy a higher Issue Priority Designator except in the case of Issue Priority Designator 00.

- C. If local stocks are exhausted and the local supply activity must requisition a specific immediate end-use requirement for a supported activity with a higher FAD, the supply activity may assign an Issue Priority Designator, commensurate with the FAD of the supported unit, to the specific requirement. This authority will not be used for the routine replenishment of the supported unit.
- D. To maintain the integrity of the UMMIPS, the quantity of materiel included on an Issue Priority Designator 00 through 08 requisition will be restricted to that amount necessary to satisfy the immediate end-use requirement. Additional quantities required to replenish stocks will be requisitioned under appropriate Issue Priority Designators 09 through 12 and will not be split into immediate end-use requirements in order to achieve a higher priority for the lesser quantities. The use of any other Issue Priority Designators for stock replenishment is prohibited.
- E. Issue Priority Designators may be upgraded or downgraded in accordance with modification procedures developed and coordinated by the System Administrator for Military Standard Requisitioning and Issue Procedures (MILSTRIP).

#### V. PRIORITY CATEGORIES

- A. There will be three priority categories: Emergency; High; and Routine. The Issue Priority Designator assigned to a specific requisition will determine the category to which the requisition is applicable. Emergency Priority requisitions are those with Issue Priority Designator 00; High Priority requisitions are those with Issue Priority Designators 01 through 07; and Routine Priority requisitions are those with Issue Priority Designators 08 through 12.
- B. Each High or Routine Priority requisition will be assigned one of several Processing and Transportation Designators by the requisitioning activity. Assignment of those designators will be made in accordance with the general guidance provided herein or with more specific guidance issued by individual DoD components. Because of the extreme urgency associated with Emergency Priority requisitions, only one Processing and Transportation Designator is applicable in those cases.

#### VI. PROCESSING AND TRANSPORTATION DESIGNATORS

- A. Time standards have been established for requisition processing and materiel delivery for Emergency, High, and Routine requisitions based on the relative importance of requisitions and the available resources required to provide service. However, allowing the requisitioner some flexibility within the standards for processing and delivery can result in substantial economies with regard to High and Routine priorities. For example, extended



consolidation time provides an opportunity to ship materiel at truckload or carload rates rather than the more expensive less-than-full load rates; and extended transportation time may allow materiel to be shipped by surface rather than air. Conversely, reducing the allowable consolidation and transportation time will enable a reduction in pipeline and safety level inventories which may be cost-effective for high investment items requisitioned on a routine replenishment basis. Therefore, several options are available to requisitioning activities when submitting either a High or Routine priority requisition.

- B. High priority requisitions may be accompanied by one of three Processing and Transportation Designators (PTD) a, b, or d.
  - 1. PTD b is the standard designator for High priority requisitions and consists of minimum consolidation of shipments and an economic mode of CONUS transportation which is normally by highway surface or parcel post.
  - 2. PTD a also allows for minimum consolidation of shipments but is normally shipped by a premium mode of transportation (air). For shipping distances under 1000 miles, highway surface transportation normally takes less than one day longer than air, and in many cases, may arrive at the same time or earlier. Use of air transportation averages about \$0.285 per ton-mile more than surface.
  - 3. PTD d allows for moderate consolidation of shipments (four days longer than PTD b and results in an estimated average reduction in transportation costs of \$3.50 per requisition.
- C. Routine Priority requisitions may be accompanied by one of three Processing and Transportation Designators, PTD c, d, or e. PTD e is the standard designator for Routine Priority requisitions and consists of Maximum Consolidation of shipments and Standard Mode of CONUS and Overseas Transportation which is normally via surface. PTD c and d are to be used for routine replenishment of high investment items in accordance with the criteria established by each DoD Component.

## VII. CONTROL OF PRIORITY DESIGNATOR UTILIZATION

- A. Commanding Officers of requisitioning installations are responsible (1) for the accurate assignment of Issue Priority Designators consistent with Force/Activity Designators assigned by higher authority and with the existing urgency of need, (2) for the assignment of Processing and Transportation Designators which satisfy the actual time of need in the most economical manner, and (3) for the validity of required delivery dates when assigned to requisitions. Similarly, Commanding Officers of international logistics control offices, receiving requisitions from Military Assistance Program requisitioners, are responsible for the review of assigned Priority Designators and delivery dates.

1. Commanders (or acting commanders during absences) will personally review all requirements based on Urgency of Need Designators E and A to certify an inability to perform mission without the requisitioned materiel.
  2. Commanders will designate, in writing, specific personnel who will personally review all requirements based on Urgency of Need Designator B to certify that the urgency has been accurately determined.
- B. The above reviews will be accomplished prior to transmission of the requisitions to the supply source.

VIII. DELIVERY DATING

A. The Standard Delivery Date.

1. A Standard Delivery Date (SDD) is a maximum ending calendar date by which normal processing and shipping in the logistics system will permit receipt and recording of the materiel by the consignee.
2. The SDD for a given materiel requirement is determined by adding the appropriate total requisition processing time standard indicated in Table 2 of Enclosure 2 to the date of requisition.
3. If the SDD will meet requirements, the appropriate Processing and Transportation Designator will be entered in the requisition in the space provided for delivery date, and no delivery date will be entered. The requisitioner will assume, unless requisition status information indicates otherwise, that delivery of the requisitioned materiel will be made not later than the SDD.

B. The Required Delivery Date/Required Availability Date.

1. A Required Delivery Date (RDD) is a calendar date which specifies when materiel is actually required to be delivered to the requisitioner and it is always a date which is earlier or later than the computed Standard Delivery Date, i.e., an RDD cannot exactly equal a computed SDD.
2. A Required Availability Date (RAD) is a calendar date which specifies the date when end items and concurrent spare parts are committed to be available for transportation to a MAP recipient.

3. After determining the valid Processing and Transportation Designator and the associated Standard Delivery Date, requisitioners may assign a delivery date to the requisition only if the requisition must be satisfied by a justified later or earlier date.
  - a. A delivery date earlier than the computed SDD may be cited only when the materiel must be delivered to a specific point by a specific day to meet one of the following conditions:
    - (1) The specific scheduled departure date for a vessel, an aircraft or other carrier is such that future replenishment of the Force/Activity from current supply sources will not be practical after departure.
    - (2) The scheduled deployment of an operational force by a fixed date.
    - (3) A firm commitment indicating the date when materiel will be available for shipment to a MAP recipient.
    - (4) The emergency requirement for materiel to meet a national emergency or avoid a disaster.
  - b. A delivery date later than the computed SDD must be cited under the following circumstances:
    - (1) Requisitions/requests for planned requirements where the date needed extends beyond the computed SDD.
    - (2) Requisitions for supply source non-stocked items on which the requisitioner has been furnished information concerning the normal procurement lead time for the item.
    - (3) MAP commitments and sales orders which bear extended Required Availability Dates (RAD).
  - c. When an RDD/RAD earlier than the computed SDD is cited, all activities shall exert every effort (including consideration of high speed transportation) to effect delivery by the specified date.
  - d. Delivery dates will be entered in requisitions (and modified when necessary) in accordance with procedures developed and coordinated by the System Administrator for Military Standard Requisitioning and Issue Procedures (MILSTRIP).



**IX. RETROGRADE MATERIEL MOVEMENTS**

- A. Returned materiel is moved without regard to the Force/Activity Designator of units involved but rather with regard to the Processing and Transportation Designator (PTD) assigned by the materiel manager. The principal determinant of the PTD in such materiel movements is the importance of materiel in the overall distribution system, as designated by the materiel manager.
- B. Processing and Transportation Designators a, c, d, and e are prescribed for this use.
1. Processing and Transportation Designator a will be used in the return of critical items and approved intensive management items (including serviceable local excesses of such items).
  2. Processing and Transportation Designators c and d will be used in the return of materiel identified by the materiel manager as qualified for automatic return to the DoD distribution system.
  3. Processing and Transportation Designator a will be used in the routine return of materiel not covered above (except surplus and scrap) such as the return of local excess stocks to supply sources.

**X. CONTRACTOR UTILIZATION OF PRIORITY SYSTEM**

- A. Whenever a DoD Component executes a contract which provides that a commercial contractor will requisition government-furnished materiel from the DoD distribution system, the DoD contracting officer will advise the contractor of the appropriate designators to be shown in such contractor-prepared requisitions. The advice will take cognizance of (1) the FAD of the National priority, program or Force/Activity for which the contract is executed, (2) potential urgencies of need, and (3) associated costs.
- B. Supply sources will observe the provisions of this Directive in meeting the delivery requirements expressed on contractor requisitions.



UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY  
SYSTEM TIME STANDARDS

I. INTRODUCTION

- A. The tables in this enclosure establish time standards for the supply of materiel from the point in time of origination of the requirement (date of the requisition) to the time of physical receipt posting to the requisitioner inventory record.
- B. All requirements with Issue Priority Designators 00 through 07 and Processing and Transportation Designators 0 and a will be processed on a seven-day workweek, 24-hour workday basis. All other requirements will be processed as a minimum during the normal workweek. Work shifts may be adjusted based on volume to meet UMHIPS timeframes. DoD Components/Agencies will assure the capability is maintained to process requirements on a seven-day workweek, 24-hour workday basis to meet implementation of authorized contingency plans. DoD Component/Agency heads may institute judicious "on call" staffing programs to satisfy these provisions. Information processing systems will continue to be scheduled and operated to insure the daily flow of information to customers.
- C. Each processing function in the total time span has been assigned a segment of the total time available. Each processing activity should attempt (considering limitations imposed by higher authority) to recover time lost in processing by previous echelons.

II. BOUNDARIES OF TIME SEGMENTS

- A. Requisition Submission. This segment extends from the date of the requisition to the date of receipt by the ultimate wholesale supply source, e.g., appropriate CONUS inventory control point or stock point, which maintains asset availability records for the purpose of filling materiel demands or ordering other supply action.
  1. Date of Requisition (as shown in Requisition Document Number field) will indicate the actual date the requisitioner requests and is denied materiel from the initial retail supply source. The initial retail supply source for afloat forces may be a tender, logistics support ship, or a land-based stock point in CONUS or overseas. The initial retail supply source for Army forces is normally the Direct Support Unit, and for Air Force units is normally the Base Support Unit.
  2. If a request for materiel can be satisfied by the initial retail supply source, no requisition will be entered into the UMHIPS.

3. Time consumed by review/approval of control offices which are intermediary between the requisitioner and initial retail supply source is counted in the time standard for this segment.
  4. If a requisition is incorrectly addressed, this segment includes the time required to route the requisition to the correct CONUS ICP.
  5. Requisitions will be identified by the mode of transmittal in one of three categories: (1) electronically transmitted (AUTODIN and telephone); (2) all other modes originating from CONUS requisitioners; and (3) all other modes originating from overseas or afloat requisitioners.
- B. ICP Availability Determination. This segment extends from the date the requisition is received by the ultimate supply source to the date that a materiel release/issue instruction (either document or punched card) is transmitted to the depot/storage site. This segment includes time required by supply source key-punching of requisitions manually prepared by the requisitioner.
  - C. Depot/Storage Site Processing. This segment extends from the date that the materiel release or issue instruction (either document or punched card) is transmitted to the depot/storage site until the date that materiel is made available to the transportation officer. This segment includes holding time of materiel release orders for the purpose of shipment consolidation and more efficient materiel picking, packaging and packing. This segment also includes the time required for packaging and packing.
  - D. Depot Hold for Transportation. This segment extends from the date the materiel is made available to the transportation officer until the date the materiel is released to a transportation carrier.
  - E. CONUS Intransit. This segment extends from the date the materiel is released to a transportation carrier to the date of receipt by the CONUS requisitioning installation or by the Port of Embarkation (POE/APOE) in the case of overseas requisitions.
  - F. Port of Embarkation (POE/APOE) Hold. This segment extends from the date of receipt of the materiel by a CONUS POE/APOE until the date the materiel is released to an overseas transportation carrier.
  - G. Oversea Shipment/Delivery. This segment extends from the date of receipt of the materiel by an overseas transportation carrier until the date that materiel is delivered to the overseas requisitioning installation. It includes materiel loading time, overseas transit time, materiel unloading time, Port of Delivery (POD) hold time, and intra-theater transit time.

- H. Receipt Take-Up by Requisitioner. This segment extends from the date of receipt of the materiel at destination until the date that the materiel is recorded on requisitioner inventory records.
- I. Containerization and consolidation, when accomplished before the materiel is received by a POE, must be effected within the time frames for segments D. and F. above.

### III. PERFORMANCE EVALUATION

- A. In order to gauge logistic system timeliness in meeting UMMIPS standards, the performance data collection system developed and coordinated by the System Administrator for Military Supply and Transportation Evaluation Procedures (MILSTEP) will be utilized to produce appropriate effectiveness reports.
- B. Measures of timely logistics system performance will distinguish among stocked item requisitions which are: (1) immediately filled; (2) deferred, although stocks are available, for some reason such as materiel management review, questionable item identification or quantity requested, or extended Required Delivery Date; and (3) delayed due to stock non-availability.
- C. The consolidation of SEAVAN containers at points of origin, i.e., depots, has been promoted by allowing flexibility in time standards between the depot transportation hold and the POE/APOE transportation hold.



TABLE 1. RECOMMENDED TIME STANDARDS

|  |                                   | TIME STANDARDS (CALENDAR DAYS) |       |       |       |         |       |       |
|--|-----------------------------------|--------------------------------|-------|-------|-------|---------|-------|-------|
|  |                                   | Emer-<br>gency                 | HIGH  |       |       | ROUTINE |       |       |
| Priority Category  |                                   |                                | PRE.  | STD.  | DIS.  | PREMIUM |       | STD.  |
| Issue Priority Designator  |                                   |                                |       |       |       | AIR     | SUR.  |       |
| Processing and Transportation Designator   |                                   | 00                             | 01-07 | 01-07 | 01-07 | 08-12   | 08-12 | 08-12 |
|  |                                   | 0                              | a     | b     | d     | c       | d     | e     |
| P<br>R<br>O<br>C<br>E<br>S<br>S<br>I<br>N<br>G<br><br>S<br>E<br>R<br>V<br>I<br>C<br>E<br><br>T | A. Requisition Submission         |                                |       |       |       |         |       |       |
|  | 1. AUTODIN                        | .125                           | 1     | 1     | 1     | 1       | 1     | 1     |
|  | 2. Other CONUS                    | .125                           | 3     | 3     | 3     | 3       | 3     | 6     |
|  | 3. Other Overseas                 | .25                            | 4     | 4     | 4     | 4       | 4     | 9     |
|  | B. ICP Availability               | .125                           | 1     | 1     | 1     | 1       | 1     | 1     |
|  | C. Depot Processing               | .25                            | 1     | 1     | 4     | 4       | 4     | 8     |
|  | D. Depot Hold                     | .25                            | 1     | 1     | 2     | 2       | 2     | 5*    |
|  | E. CONUS Intransit                | .375                           | 2     | 4     | 4     | 2       | 4     | 7     |
|  | CONUS Seg.                        | 1.125                          | 6     | 8     | 12    | 10      | 12    | 22    |
|  | F. POE/APOE Hold                  | .25                            | 2     | 2     | 2     | 2       | 2     | 13*   |
|  | G. Overseas Shipment/<br>Delivery |                                |       |       |       |         |       |       |
|  | 1. West. Hemisphere               | .50                            | 4     | 4     | 4     | 4       | 4     | 25    |
|  | 2. Europe, Med., Africa           | .75                            | 6     | 6     | 6     | 6       | 6     | 30    |
|  | 3. West. Pacific                  | 1.25                           | 7     | 7     | 7     | 7       | 7     | 40    |
|  | H. Receipt Take-Up                | .25                            | 1     | 1     | 1     | 1       | 1     | 3     |
|  | TOTAL CONUS                       | 1.375                          | 7     | 9     | 13    | 11      | 13    | 25    |
|  | TOTAL OVERSEAS                    |                                |       |       |       |         |       |       |
|  | 1. West. Hemisphere               | 2.125                          | 13    | 15    | 19    | 17      | 19    | 63    |
|  | 2. Europe - Africa                | 2.375                          | 15    | 17    | 21    | 19      | 21    | 68    |
|  | 3. West. Pacific                  | 2.875                          | 16    | 18    | 22    | 20      | 22    | 73    |

\*When SEAVAN consolidation is accomplished at the depot, the Depot Hold Time is 15 days, and the POE Hold Time Standard is 3 days.

NOTE: Only AUTODIN summations are shown.



TABLE 2. SUMMARY OF TOTAL REQUISITION PROCESSING TIME STANDARDS  
BY PROCESSING AND TRANSPORTATION DESIGNATOR (PTD)

| Requisition Origin<br>and Destination | Time Standard (Calendar Days) for PTD |    |    |    |    |    |
|---------------------------------------|---------------------------------------|----|----|----|----|----|
|                                       | o                                     | a  | b  | c  | d  | e  |
| <b><u>TOTAL CONUS</u></b>             |                                       |    |    |    |    |    |
| • AUTODIN                             | 1.375                                 | 7  | 9  | 11 | 13 | 25 |
| • OTHER                               | 1.375                                 | 9  | 11 | 13 | 15 | 30 |
| <b><u>TOTAL OVERSEAS</u></b>          |                                       |    |    |    |    |    |
| • AUTODIN                             |                                       |    |    |    |    |    |
| 1. Western Hemisphere                 | 2.125                                 | 13 | 15 | 17 | 19 | 63 |
| 2. Europe, Med., Africa               | 2.375                                 | 15 | 17 | 19 | 21 | 68 |
| 3. Western Pacific                    | 2.875                                 | 16 | 18 | 20 | 22 | 73 |
| • OTHER                               |                                       |    |    |    |    |    |
| 1. Western Hemisphere                 | 2.250                                 | 15 | 17 | 19 | 21 | 71 |
| 2. Europe, Med., Africa               | 2.500                                 | 17 | 19 | 21 | 23 | 76 |
| 3. Western Pacific                    | 3.000                                 | 18 | 20 | 22 | 24 | 81 |

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| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number)<br>This report describes our study of the Uniform Materiel Movement and Issue Priority System (UMMIPS). Our primary conclusions and recommendations are drawn in three areas: (1) structure of the priority system, (2) structure and definition of the processing segments, and (3) prescribed time standards.<br><br>Specifically, the proposed structure of the priority system allows the user the flexibility to specify an issue priority designator, and a processing and transportation designator. The recommended revisions to the structure and |                       |  |

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definition of the processing segments are designed to increase management visibility and control. Finally, revised time standards are proposed. These standards reflect the recommended UMMIPS structure, the revisions to the processing segments, and our analysis of the current UMMIPS.

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